

# Farm Labor Contractor Safety and Health Guide

DEPARTMENT OF INDUSTRIAL RELATIONS

**Cal/OSHA Consultation** 

**Education and Training Unit** 



# Farm Labor Contractor Safety and Health Guide

This guide is not meant to be a substitute for—or a legal interpretation of—the occupational safety and health standards. The reader is cautioned to refer directly to the *California Code of Regulations*, *Title 8*, or the *Labor Code* for detailed and exact information, specifications, and exceptions.

# FATAL FACTS

# Tractor Driver's Head Crushed by Moving Tractor

A tractor driver fell to the ground when his tractor ran into a row of grapevines. The tractor continued moving forward. A rear wheel crushed the tractor driver's head. He died instantly.

# How could this have been prevented?

- ✓ Do not climb on or off moving tractors.
- ✓ All tractors should be equipped with seat belts and rollover protective structures (ROPS).
- Workers should not try to operate equipment when they are feeling sick.
- ✓ Tractors should have safety devices that stop them from moving forward when the driver is not in the seat.

# **Fruit Picker Dies of Heat Stroke**

When fruit bags are full, they often weigh about 50 pounds. Workers carry them from the field to the truck, and crews usually do not stop for breaks. One fruit picker collapsed and died of heat stroke after just four hours of work. He was on a bus to go to another field when he began to pant and get sick to his stomach. The foreman stopped the bus and called an ambulance. The worker was taken to the hospital and treated, but died 36 hours later of heat stroke.

# How could this have been prevented?

- Workers should be instructed to be aware of dangers while working in the heat.
- Encourage workers to take breaks and drink water.

# **Tree Trimmer Electrocuted in Orchard**

A tree trimmer was pruning walnut trees in an orchard. He was using a lift bucket "cherry picker." High voltage power lines crossed over the last row of trees just above the tree tops. The power company was usually called in to trim these trees; however, on this day no call was made. The worker began



Prevent electrocutions while pruning: Always maintain at least a 10-foot clearance from power lines. Do not prune tree branches that cross power lines. Notify your employer to contact the utility company. PG&E in Northern CA at 1-800-743-5000, or Southern California Edison at 1-800-655-4555.

pruning the last row of trees, and when he raised his lift bucket to the top of a tree, his pruning shears touched the power line and electrocuted him. Although co-workers pulled the lift bucket and platform away from the power lines with a truck, the worker died instantly. His body was badly burned.

# How could this have been prevented?

- ✓ Hold safety meetings before every shift and instruct workers of dangerous power lines in their work areas.
- Be aware of the location of all power lines, and stay at least 10 feet away.
- ✓ If possible, ask the power company to shut off power to lines in the work area.
- ✓ Use tree trimmers or companies who are specially trained to work near power lines.
- Mark dangerous areas that employees should avoid, such as trees near power lines.
- ✓ Work as a team. Other tree trimmers in the orchard should be on the lookout for maintaining a 10-foot clearance.

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# INTRODUCTION

This document was developed with the help of farm labor contractors (FLCs) and agricultural safety and health professionals to provide general guidance for employers and employees about preventing work-related injuries and illnesses. The biggest challenge is to give this vital information to all your supervisors and workers and to ensure that they clearly understand the job hazards before starting a new crop or task. Information described in this guide also applies to growers who directly hire their own crews. Each section, including the checklists and fact sheets, can be used individually. Fact sheets and checklists may be reproduced as handouts and distributed during employee training.

### This guide has six sections that address farm labor contractors' main concerns:

### **Section 1. Background Information**

Emphasizes the five most common areas in which fatal and serious injuries occur in California agriculture.

### Section 2. The Required Injury and Illness Prevention Program (IIPP)

Contains valuable Injury and Illness Evaluation Sheets. This checklist alone can help you preserve lives, prevent injuries, and save money in worker's compensation costs.

# Section 3. Worker Training

Assists employers in evaluating training for supervisors and employees. Effective training for supervisors is essential to make the workplace a success in injury prevention. New employees are at greatest risk; they should receive hands-on training if possible. Effective training includes employee participation and feedback.

### Section 4. Employers' Obligations Under the Law—The Cal/OSHA Program

Informs employers of the Cal/OSHA Program and other cooperating units. Included are the "top 10" violations and posting requirements. Refer to page 24, "Cal/OSHA District Offices (Compliance) Directory," in the event that you need to report a fatal or serious accident. The directory includes names of bilingual Cal/OSHA personnel.

### Section 5. Fact Sheets and Checklists

Includes handouts for your supervisors and employees, including tractor drivers. Educational fact sheets and checklists are provided to help you and your supervisors conduct safety meetings. Train your workers before employees start a new crop or before new work begins. Examples of codes of safe work practices by job classification are also included.

# Section 6. Other Available Assistance

Includes a reference list of various free services (such as free pesticide training for your employees) from nonprofit agricultural safety and health organizations. The Cal/OSHA Consultation Area Offices can also assist you at no cost, and their telephone numbers are listed in this section. You can request free copies of the Spanish-language publications, the IIPP for Intermittent (seasonal) Employers, and the Lockout/Tagout from your nearest Cal/OSHA Consultation Area Office.



**Prevent bodily injury:** Never insert any part of your body to unjam equipment



**Prevent falls:** Always use proper ladders



**Prevent tractor accidents:** An operator must be at the controls of equipment in motion.



**Prevent vehicle/woker accidents:** Always check underneath and behind vehicle before starting vehicles or tractors.

# BACKGROUND INFORMATION

The farm labor contractor, like all other employers, holds ultimate responsibility for the health and safety of his or her employees. Operating in full compliance with the law is challenging but not impossible. This guide was written to help you protect your workers and to prevent or reduce the high number of injuries and illnesses that occur in the agricultural industry.

Labor laws and regulations are intended to preserve the health and safety of your workers. Farm labor contractors will benefit from increased competitiveness, increased productivity, and reduction of operation costs by following the regulations.

# Why was this guide written?

- To save farm workers' lives.
- To reduce the number of disabling injuries.
- To save money in worker's compensation and avoid costly Cal/OSHA penalties:
  - The average cost for a back injury that results in serious disability is \$25,000 in workers' compensation.
  - A severe fall from a ladder that results in an injury requiring surgery can cost as much as \$85,000 in workers' compensation. (Figures provided by SCIF Claims Department, 1997.)
  - Each willful violation can result in penalties up to \$70,000.

showed that 92 percent of California's crop workers were born outside the United States; the overwhelming majority are from Mexico. 1

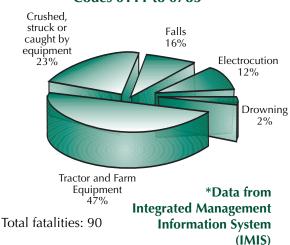
There are over 1,500 farm labor contractors statewide responsible for managing, directing, and training much of the agricultural workforce. In California, about one of every three farm workers is a contract employee working for a labor contractor.<sup>2</sup> For every one farmer in California, there are 18 hired agricultural workers.3

Workers in the California farming, forestry, and fishing industries are at the greatest risk of being fatally injured on the job!

# **Defining the Problem**

California is the most productive agricultural state in the nation. More than 250 agricultural crops are produced commercially by more than 84,000 farms, generating a yearly farm income of over \$25 billion. California's agricultural workforce totals more than one million workers, who primarily speak Spanish and other non-English languages. A 1993 statistical report

# **Agricultural Fatalities Inspected** in California, 1993-1997 **Standard Industrial Classification (SIC)** Codes 0111 to 0783



<sup>1</sup> H. R. Rosenberg and others, California Findings for the National Agricultural Workers Survey. Research Report No. 3, U.S. Department of Labor, Office of the Assistant Secretary for Policy, Office of Program Economics. K. Weeks and others, "The Nation's Most Hazardous Industry," Agricultural

Health and Safety Report (University of California, Davis, 1993).

M. Schenker, "Preventive Medicine and Health Are Overdue in the Agricultural Workplace," Journal of Public Health Policy, No. 17 (1996) 3:275–305.



**◆ Prevent back injuries:** Train employees in proper material handling techniques.

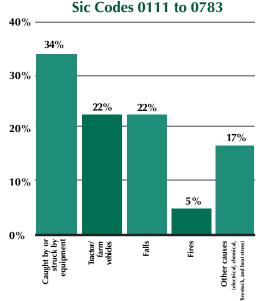


**Prevent livestock injuries:** Train employees in animal handling and emergency procedures in the event of an injury.



**Prevent Power Take-Off (PTO) injuries:** Guard all Power Take-Off shafts and couplings.

# Causes of Serious Agricultural Injuries in California, 1/1/97-12/31/97 (DOSH Compliance)



# Top 5 Causes for Fatalities in California Agriculture from 1993–1997 Sic Codes 0111–0783

- 1. Tractor and farm equipment
- 2. Crushed, struck by a moving or falling object, and caught by equipment
- 3. Falls
- 4. Electrocution
- 5. Drowning

# Five High-Risk Areas

Motor vehicle accidents, electrical contacts, moving or falling objects, back injuries, and slips and falls are the most common and most costly workplace hazards in agricultural operations.



**Prevent truck/equipment accidents:** Follow safe operating practices.

# (1) MOTOR VEHICLES, TRACTORS, AND FARM EQUIPMENT ACCIDENTS

Nearly half of all fatalities recorded in the California agriculture industry involve tractors or moving farm equipment. This includes driving trucks or cars on and off the

farm and operating tractors, forklifts, all-terrain vehicles (ATVs or 3-wheelers), golf carts, and transporters (*raiteros*). Other agencies with overlapping regulatory authority in this area include the U.S. Department of Labor (DOL), California Highway Patrol (CHP), Department of Motor Vehicles (DMV), and the U.S. Department of Transportation (DOT).

# How can you prevent these accidents?

- Ensure that tractors always have a driver at the controls while in motion.
- Ensure that all traffic laws and rules are followed, including speed limits, signaling, and obeying road and traffic signs.
- Allow only trained and qualified workers to operate farm equipment.
- Ensure that all cars and trucks are operated by drivers with valid California driver licenses.
- Make sure that drivers and passengers use seat belts.
- Teach workers to look out for potential road hazards such as soft shoulders, narrow rights-of-way, loose gravel, bumps, potholes, and deep trenches.

- Try to avoid driving in bad weather conditions such as dense fog, haze, rain, or wind.
- Do not permit the operation of any motor vehicle if you suspect that the driver is under the influence of alcohol or another substance that may impair alertness.
- Discipline operators who do not follow safe driving practices.
- Do not allow riders on trailers, tractors, bailers, or other moving equipment unless a passenger seat and belt have been installed.



**Prevent electrocution:** Do not store pipes under power lines.

### (2) ELECTROCUTION

The second leading cause of fatal injuries in California agriculture is electrocution. Each year, field workers' lives are lost when they are struck by lightning or come in contact with high voltage lines while pruning trees, harvesting, or moving irrigation pipes. Electrical contacts can also occur when workers use metal ladders or fail to unplug electrical equipment before doing maintenance or repair work. Hedgers and toppers, cotton harvesters, land levelers,

pruning towers, cherry pickers, and manlifts have all been involved in electrical contact accidents.

### How can you prevent these accidents?

- Remember the 10-foot rule: Keep all vehicles, equipment, tools, and people at least 10 feet away from power lines.
- Ensure that trees are pruned well before they get close to the power lines. Contact your nearest electrical utility for assistance before pruning the trees yourself. Call PG&E in Northern California at (800) 743-5000 or Southern California Edison at (800) 655-4555.
- Teach your workers about avoiding the hazards of working near power lines. This includes keeping hand-held tools (loppers, pruners, etc.) a safe distance of at least 10 feet away from power lines.
- Instruct workers to keep the irrigation pipe horizontal or even with the ground and to avoid standing the pipe upright until making certain that no power line is overhead.
- Instruct workers to check for overhead lines when they tie down loads.
- Ensure that workers seek proper shelter during lightning storms. Avoid standing under a tree.
- Ensure that workers or supervisors receive appropriate lockout/tagout training for electrical equipment. Just turning off the machine is not enough.
- Instruct workers to never attempt to service or repair any electrical equipment if they are not properly trained to do so.
- Follow the *California Code of Regulations* (CCR), *Title 8*, Section 2510.5 for electrical regulations when working at wet and damp locations.
- Ensure that every electrical circuit and breaker is properly covered and maintained.

Note: For a free copy of Cal/OSHA's lockout/tagout publication and free assistance on lockout/tagout and deenergizing equipment, contact your nearest Cal/OSHA Consultation Service Office. Phone numbers and addresses are listed on the last page of this publication.

### (3) MOVING OR FALLING OBJECTS

The most common cause of **lost-time** work injuries in the California agriculture industry is being struck by moving or falling objects. Each year over 5,000 workers in California agriculture suffer disabling injuries as a result of accidents involving:

- Moving equipment or vehicles
- Falling or moving heavy objects, such as bales, bags, and cans
- Cows and other large animals, which can cause injury through unexpected movements or kicking
- Being struck by tools such as saws, shovels, hammers, pruning shears, or buckets

## How can you prevent these accidents?

- Operators and those working around moving equipment should be constantly aware of their surroundings and on the lookout for other workers nearby.
- Always make sure that guards are secured in place on both equipment and vehicles before operating.
- Ensure that hand tools are properly maintained and used in a safe manner.
- Minimize manual handling of heavy objects, working at heights, and working with moving equipment.
- Secure stacked and stored materials to prevent falling.
- Ensure that stored energy is released or otherwise secured.
- Ensure that workers around animals are trained in animal handling, know where

- escape openings in the fences are, and know what to do in the event of an injury.
- Ensure that personal protective equipment (PPE) such as eye and face protection is provided and used when required.
- Training, anticipation, and awareness can prevent worker injuries caused by falling or rapidly moving objects.



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**Prevent back injuries:** Train employees to use correct lifting techniques.

### (4) BACK INJURIES

Each year, over 3,000 workers in the California agriculture industry suffer costly disabling back injuries. Agricultural work often involves bending, reaching, twisting, lifting and carrying boxes and bags, or other tasks related to growing or picking crops. These activities require workers to bend, twist, stoop, or assume awkward or fixed postures that can lead to back injuries. Other hazards that can cause back injuries include working on elevated or slippery surfaces and the unexpected movement of animals in confined areas.

### How can you prevent these injuries?

• Educate workers in proper lifting and carrying techniques. Rotate workers

- assigned to perform heavy lifting jobs.
- Encourage a "team lift or assistance" (two or more employees) for heavy loads whenever possible.
- Break down or reduce the size of loads whenever possible.
- Encourage frequent breaks to stretch and rest tired muscles.
- Teach workers to know their limits.
- Minimize overextending.
- Encourage workers to follow safe work practices.



**Prevent slips and falls:** Keep steps clean.

# Train workers to take special care with ladders when working on:

- 1) Elevated surfaces
- 2) Uneven or muddy terrain
- 3) Areas with holes and ditches

Also ensure that employees maintain balance and good footing.

# (5) SLIPS AND FALLS

Slips and falls are the third leading cause of lost-time injuries. Agricultural tasks include working at heights, on uneven surfaces, around moving equipment, and in awkward positions or places. Often these

tasks are done while also carrying or moving a heavy load or other equipment. Barn floors where hay or feed is stored can be slippery when dry or wet, and field conditions are often muddy and uneven. Each year over 3,000 workers in California agriculture suffer disabling injuries from slips and falls.

# How can you prevent these accidents?

- Make sure that workers avoid running and that they DO NOT jump across canals or ditches.
- Do not allow riders on moving equipment unless a passenger seat has been provided by the manufacturer.
- Make sure that operators and other workers don't jump off equipment, especially when it is moving.
- Keep farm equipment surfaces clean of mud.
- Train workers to take special care around steps or uneven terrain, surfaces with deep holes, and inclined surfaces.
- Keep floors as clean and dry as possible, especially in areas where oil, water, animal wastes, or other slippery materials accumulate.
- When railings are required, make sure that they are installed on the equipment.

Other hazards related to agricultural operations include: Assaults (workplace violence), heat stress, and chemical exposures. For more information contact your nearest Cal/OSHA Consultation Service Area Office or your nearest Workers' Compensation Insurance Loss Control Department.

Note: Statistics provided by Dr. James Meyers, UC Berkeley, Farm Safety Program and AgSafe Coalition.

# REQUIRED INJURY AND ILLNESS PREVENTION PROGRAM (IIPP)

# What is an IIPP?

Every employer in California is required to have a *written* injury and illness prevention program that contains eight elements:

- 1) Management commitment and assignment of responsibilities;
- 2) A safety communications system with employees;
- 3) A system for ensuring employee compliance with safe work practices;
- 4) Scheduled inspections/a hazard evaluation system;
- 5) Accident investigation;
- 6) Procedures for correcting unsafe or unhealthy conditions;
- Safety and health training and instruction; and
- 8) Recordkeeping and documentation.

The goal is to reduce workplace injuries and illnesses through the identification and control of hazards as well as through employee training. Successful safety programs in high-

risk industries such as agriculture have the following in common:

- Management commitment—Effective injury prevention depends on the active involvement of supervisors and managers.
- Worker involvement—Successful injury prevention entails worker involvement.

  Remember that your workers are your "eyes" in the field for hazard identification, and they often have ideas for making a job safer.

  Worker involvement provides powerful motivation for improvement.
- Elimination of hazards—Hazard identification and correction as well as proper use of equipment, including personal protective equipment, are effective ways to prevent injuries.
- Education and training—Safety training is an important part of preventing injuries. Make sure that your workers know that you value their safety. Teach them how they can be safe at work and praise them when they work safely.



Employee training: All workers should participate and receive feedback.



# Do You Have an Effective IIPP?



In order to prevent injuries, accidents, and illnesses, you are required to implement and maintain an effective IIPP at your workplace. This checklist will help you determine whether your current program meets minimal requirements. Pay special attention to giving feedback to — and receiving it from — your workers. Go over each of these questions with them.

If you answer "**no**" to one or more items, you will need to determine what information you are missing, and you may need to seek further assistance or re-evaluate your existing IIPP.

	Торіс	Yes	
	ignated a person with the authority and responsibility for implementing nd Illness Prevention Program?		
Person's name			
Managers/Supe	ervisors in charge		
Do workers kno	w this information?		
(for example:	a system that ensures all workers are following safe work practices incentives or rewards for following safe work procedures and olicies for disciplining unsafe behaviors)?		
• How do you i	motivate your workers to work safely?		
• Do you discip	line workers and supervisors who work unsafely?		
Do workers r	egularly submit safety suggestions and report hazards?		
Are your wor are followed?	kers involved in helping each other whenever possible to ensure that safe work practices?		
3. Do you have	a system of effectively communicating with your workers and supervisors?		
• How do you	communicate with workers?		
	eport unsafe job hazards (such as damaged or defective equipment, broken ladders, defective brakes, or unguarded machinery) or any other unsafe work conditions?		
• Are safety an	d health complaints and suggestions received and responded to in a timely manner?		
How are emp	loyees encouraged to communicate with you?		
• (an workers	inform management anonymously about workplace hazards?		





# Do You Have an Effective IIPP? - Page 2 Topic Yes No Do you encourage the reporting of safety violations, health hazards, or unsafe conditions? Do you provide safety and health orientations for new employees? How often do you have safety meetings for all employees; for example, monthly, weekly, How do you motivate your workers to work safely? 4. Do you have an effective system to identify and correct job hazards and work practices, including conducting regular safety inspections? • How do you identify unsafe work practices? • How often do you conduct these inspections? Who makes the hazard correction? • If new substances, procedures, or equipment present new hazards, are inspections conducted? Do you inspect every new job site before work begins? 5. Do you have a system of investigating all work-related accidents that result in injury or illness? • Who is responsible for investigating accidents? Name: • Do you interview injured workers and witnesses? • Do you determine the cause of the accident? • Do you include recommendations to prevent such accidents from recurring? Do you investigate "close calls" (situations that nearly result in an accident)? Do you know about reporting serious injuries to Cal/OSHA within 8 hours? 6. Do you provide training to all new supervisors and workers about safety and health issues that affect them and hazards that are specific to their job assignments? • Do you write down the safety and health topics you cover? Do you keep track of the number of hours of training you provide each year?





# Do You Have an Effective IIPP? - Page 3

Торіс	Yes	No
<ul> <li>Do you teach workers about emergency procedures, available medical services, first aid, and how to report accidents and unsafe conditions?</li> </ul>		
Are workers trained in proper lifting techniques?		
<ul> <li>Do you teach workers about the use of appropriate clothing, including gloves, footwear, and personal protective equipment?</li> </ul>		
Is information and training for workers and supervisors provided in a language they understand?		
<ul> <li>Do you train your supervisors on the hazards and responsibilities faced by the employees they supervise?</li> </ul>		
7. Do you document your safety and health efforts?		
Are rules clearly stated and written?		
Are safety and health orientations for new workers documented?		
Are inspections and hazard corrections documented?		
Are safety training sessions documented?		
Are accidents and investigations documented?		

# **WORKER TRAINING**

# New Employees Are at Greatest Risk

The first few days and weeks of employment are when most accidents happen. This is why it is extremely important to set a good example during and after new employee training—especially in the field, where workers can observe you.

 Don't expect employees to find their own way safely just because they are "experienced."

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- Provide interactive safety training before an employee begins working. Proper training can save a person's life.
- Practice what you preach, and your workplace will become safer. Always follow safe work practices.
- Supervisors must be committed to the established safety training program.
- A well-organized safety training program can save lots of money in comparison to an accident or costly fines levied by governmental regulatory agencies.

# U C C E S S

# A Success Story from the Central Valley

A farm labor contractor in Avenal, California, started his farm labor contracting business with 80 employees in 1992. Today, six years later, he has over 8,000 employees and an insurance experience modification rate of 46 percent. In 1996, he saved approximately \$750,000 in workers' compensation costs.

This farm labor contractor attributes the company's growth and low accident rate primarily to his commitment to training and employee involvement by:

- Providing information on how workers can protect themselves and how to recognize job hazards
- Giving workers an understanding of the painful consequences of injuries and how important it is to bring hazards to your attention before such an accident occurs



This farm labor contractor has an incentive program that reinforces the employer's safety and health program.

# Documentation/Recordkeeping

# Which training records do I need to keep and for how long?

# When you have 10 or more employees:

- Record the employees' names, the training date(s), type or topic of the training, and the training providers' names.
- Maintain the records for at least one year. It is a good idea to keep records longer in case you
  need them later for legal reasons.

# When you have fewer than 10 employees:

- Keep a log of instructions that states the employee's or employees' unique job hazards;
   and
- Provide employees with copies of their records upon termination of employment (See *California Code of Regulations, Title 8*, Section 3203 for exceptions);
- Maintain records of training you provide to these employees, as you would for long-term employees.

Note: If you are cited under *California Code of Regulations, Title 8,* Section 3457, "Field Sanitation," annual field sanitation reports are required to be filed with Cal/OSHA for the next five years. See Form C-46-C.

Toilet maintenance and service records must be kept for at least two years.

For more information or further assistance, contact your nearest Cal/OSHA Consultation Service Area Office or your Worker's Compensation Insurance Loss Control Department.

Use the following checklists to assist you in evaluating the training needs of your supervisors. Encourage supervisors to use the employee training evaluation checklist to evaluate the training of their crews.





# Employer's Checklist for Supervisors' Training

**Note**: If you can't answer "yes" to all of these questions, you may need to reassess your current practices.

YES	NO	
		Do you ensure that your supervisors inform workers about the information contained in the required posters?
		Do you explain and demonstrate to supervisors their tasks and responsibilities, as well as the hazards that may exist in the field?
		Do you reinforce safety behaviors that supervisors and workers perform?
		Do you compliment and/or reward supervisors for following safe work practices?
		Do you make periodic checks of your supervisors and talk to workers to ensure that they understand work hazards?
		Have you used your insurance carrier or other safety provider for safety and health training?
		Do supervisors conduct effective safety and health training sessions, encourage discussion and participation, ask questions, share ideas, and give feedback to the workers?
		Is training provided in a language that workers understand?
		Do supervisors demonstrate the safe use of the equipment and tools provided to workers?
		Do supervisors encourage experienced workers to work with new employees?
		Do you conduct safety meetings and use safety audiocassettes or videocassettes to train workers?
		Do you and the supervisors make sure that directions are understood by asking workers to demonstrate or to repeat the main points in their own words?
		Do supervisors reinforce the safe work practices performed by workers?
		Do supervisors compliment and/or reward employees for following safe work practices?
		Are supervisors disciplined when they don't follow safe work practices?
		Do supervisors use relevant workers' experiences, brief stories, or summaries to train all workers?





# Supervisor's Checklist for Effective Training



		As a contractor and or supervisor do you:
YES	NO	
		Ask your crew members what they are most concerned about or would like to know about?
		Involve employees as much as possible during your training sessions?
		Ask for volunteers and use "real-life" examples that employees can relate to, role-plays, exercises, demonstrations, group discussions, and/or a question-and-answer format?
		Use examples from your own operation or ask the crew members to share their own work experiences or stories of prior accidents?
		Tell your crew members how failing to follow safety precautions or misusing safety tools could hurt them?
		Ask specific questions regarding hazards?
		Praise employees who ask questions or offer you their comments—even if you disagree with their point of view?
Cal/O	SHA sa	afety and health professionals may evaluate the adequacy of training by:
	Revi	ewing the content of training materials and curriculum.
	Aski	ng employees questions that relate to the subject matter.

# Can an employer be cited if an employee acts improperly?

Yes, unless the employer proves the following elements:

- 1. The employee was experienced in the job being performed;
- 2. The employer has a well-devised safety program that includes training employees in matters of safety respective to their particular job assignments;

Watching employees carrying out their work to see whether they use safe work practices.

Reviewing or conducting accident investigations to determine whether lack of training was a

- 3. The employer effectively enforces the safety program;
- 4. The employer has a policy of imposing sanctions upon employees who violate the safety program; and
- 5. The employee caused a safety infraction that he or she knew was a violation of the employer's safety program.



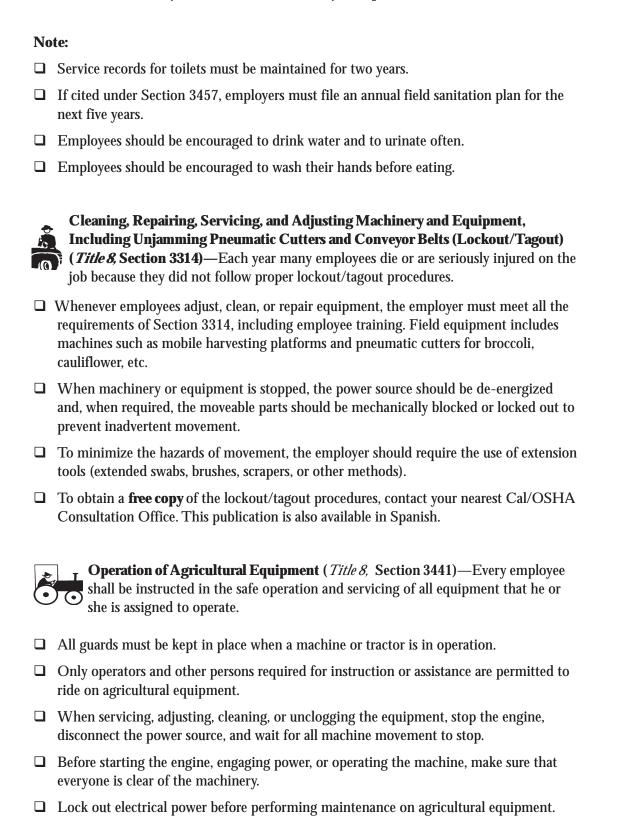


# Cal/OSHA Agricultural Training Requirements

Employers must always provide training for their supervisors and their other employees. The following training topics are required for almost all agricultural employees, depending on the specific operations performed in the workplace. These checklists can help you comply with most common training requirements for agricultural workers. For specific requirements, please refer to *California Code of Regulations, Title 8,* or contact your nearest Cal/OSHA Consultation Service Area Office.

<b>First Aid and CPR (</b> <i>Title 8,</i> <b>Section 3439)</b> —There should be at least one person trained in administration of emergency first aid for every 20 workers. If the field is within 15 minutes of a medical care facility, then the trained first aid people and safety communication system are not required. <b>What is first aid?</b> It is simply those things you can do for the victim before professional medical help arrives. Train workers in the following:
☐ Providing immediate treatment for injuries
☐ Maintaining first aid kits that are provided in each foreman's vehicle and/or at the work site
☐ Knowing where first aid kits can be found
☐ Replenishing first aid materials, keeping them sanitary and in usable condition
☐ Knowing the basics of first aid
☐ Taking precautions against bloodborne pathogens
☐ Reporting all injuries to the immediate supervisor
☐ Using eye wash and showers, available at the work site, in the event of exposure to chemicals
☐ Taking first aid provisions to remote work sites
☐ Knowing the communication system to use in the case of an emergency: radio or cellular phone
☐ A CPR qualified person should be available to provide required medical assistance to an injured worker within 4 minutes.
The name of the medical facility where injured workers should be taken is:
Field Sanitation ( <i>Title 8</i> , Section 3457)—Toilet and handwashing facilities must be located within one-quarter mile or a five-minute walk from the work site, and must be accessible to each employee throughout the workday. It is important that employees understand the field sanitation requirements. Please refer to page 38, "Water and Sanitary Facilities in the Field."









	All self-propelled equipment, including tractors, must have an operator at the controls when the vehicle is in motion. (See Section 3441[b] for exception.)
	The driver <b>is prohibited</b> from climbing onto or down from the tractor while it is operating.
of stin	Transporting of Employees ( <i>Title 8</i> , Sections 3701, 3702)—Only licensed drivers of the appropriate class shall operate a farm labor truck or buse. Trucks or buses should have at least a 46-inch-high rail or enclosure on the sides and back the vehicle to prevent falls. The vehicle should also be equipped with handholds, steps, rups, or similar devices arranged for the safe mount and dismount of employees. Please er to page 33, "Farm Vehicle Safety."
	Manual Lifting and Carrying: Techniques to Avoid Musculoskeletal Injuries— Agricultural workers have a high risk of back injury. Long hours of heavy lifting, carrying, bending, and stooping can lead to back pain or serious injury. We encourage you to in your workers on proper lifting procedures using the fact sheet, "Back Safety on the rm," on page 35.
	<b>Tools (</b> <i>Title 8</i> <b>, Section 3456)</b> —Using short-handled tools (less than four feet in length) for weeding and thinning while in a kneeling or squatting position is prohibited. Instruct workers on the following:
	Tools that are worn, defective, spliced, or broken should always be replaced or repaired.
	Striking tools shall be free of mushroomed or burred heads.
	Metal poles or poles that conduct electricity <i>may not be used</i> for fruit picking or nut knocking.
	Tree Work and Pruning Operations ( <i>Title 8</i> , Section 3428)—Weather conditions such as fog and rain make ladders and shears more slippery. Employees need to take ra precautions in such weather to prevent injuries to themselves and to others. Employees buld be instructed to do the following:
	Do not throw or drop tools from trees, unless warning has been given and the ground area is clear.
	Stop powered saws for all cleaning, refueling, adjusting, and repairs unless otherwise indicated by the manufacturer.
	Hang pole saws with the sharp edge pointing away from the employee.
	Climbers: Inspect ropes for cuts or abrasions and remove from service any ropes that have deep cuts.
	Do not hang pole pruners, pole saws, and pruning shears on utility wires or cables.
	Maintain pruning shears; keep them sharp and in good condition. Defective shears must not be used.



Always carry pruning shears	with the point facing down whe	en warking or standing.	
☐ Always know where your fing on grapes pose a special haza		ng a cut. Hand shears used	
	☐ Know where your other hand is when you are using a saw, and carry folding saws in a locked position. Folding saws should be sharp.		
☐ Be alert and aware of other e	mployees working nearby.		
working surfaces mor	( <i>Title 8</i> , <b>Section 3210</b> )—Guard re than 30 inches above the floor oeboards, and stair rails must co	r, ground, or other working	
v-belts must be guarded	ssors and Air Tanks ( <i>Title 8,</i> Sed. A permit for pressure vessels is et or has more than 150 psi.	v -	
to have a written Emergemployees what to do in	an ( <i>Title 8</i> , Section 3220)—The gency Action Plan, but if you han the event of fire and other eme and made available for employ <i>fixed structures</i> . Identify the location	ergencies. The plan should vee review. <i>This section</i>	
☐ First aid kits ☐ Posted emergency numbers ☐ Pipeline valves			
☐ Main water valve ☐ Fire extinguishers ☐ Emergency eye wash		☐ Emergency eye wash	
☐ Backup communication ☐ Alarm system switches ☐ Chemical storage area		☐ Chemical storage areas	
Discuss the following question:			
☐ Are there any critical operation	ons or unique hazards?		
a fire plan (except in lieu		ould tell employees of any sed. If you have fewer than	
☐ Safe use of welding and cutting torches			
☐ Proper storage of flammable or combustible liquids			
☐ Dangers of using damaged electrical cords			
☐ Storage of oily rags in enclosed metal containers			
☐ Dangers created by smoking	and other open flames		









☐ Importance of bonding and grounding to eliminate static charge		
☐ Classification of flammable storage and fueling areas		
☐ Posted warning signs prohibiting sources of ignition		
☐ Location of fire extinguishers or other apparatuses (specify)		
☐ Initial training, then follow-up training each year if employees are expected to use a fire extinguisher		
<b>Note:</b> If the employer does not expect employees to use fire extinguishers at the work site, then a written Emergency Action and Fire Prevention Plan must be in place. The training requirements for the emergency plan and fire plan must also be implemented.		
Immediate Reporting of Any "Serious" Injury, Illness, or Death of an Employee at the Workplace ( <i>Title 8</i> , Section 342)—Reporting <i>immediately</i> means reporting as soon as is practically possible, but no longer than eight hours after the employer knows of the death or serious injury/illness. Report by phone or by fax to the nearest Cal/OSHA District Office. Telephone numbers for Cal/OSHA offices are provided on page 24. The reporting party will need to have the following information at hand:		
☐ Time and date of accident		
☐ Employer's name, address, and telephone number		
□ Name and job title of person to contact		
□ Name and address of injured employee(s)		
□ Nature of injury		
□ Location where injury occurred		
Access to Medical and Exposure Information ( <i>Title 8</i> , Section 3204)—Each employer shall inform current employees of the existence, location, and availability of their medical and workplace exposure records. Tell your employees the name of the person responsible for maintaining and providing access to these records.		



**Hazard Communication Program (***Title 8,* **Section 5194)**—You must maintain and develop a written program that gives employees information about hazardous substances to which they may be exposed at the workplace. Employee training must include:

☐ Material Safety Data Sheets (MSDS), reports/records, and information on use of hazardous substances, including pesticides, cleaning agents, fuel, oil, etc., in an accessible location for





employee review. (Have information available to take to a doctor in the event of a chemical reaction or chemical contact.) ☐ Location of the employer's list of the hazardous substances that employees use in their work ☐ List of Material Safety Data Sheets (MSDS) ☐ Purpose of the MSDS (to describe the substance[s], the hazardous properties of the substance[s], and protective measures for safe use) **Note:** Department of Pesticide Regulations (DPR) and Worker Protection Standard require a completed A-8 or A-9 form to be displayed in an appropriate location. See the last pages of Section 5 for copies of the forms. **Personal Protective Equipment (PPE) (***Title &* **Section 3380)**—The employer shall ensure that employees are instructed on where and how to use PPE, which includes equipment designed to protect the body, eyes, hands, ears, and feet. Employees must be trained to: ☐ Wear appropriate gloves and a full body suit when in contact with chemicals. ☐ Use such eye protection as safety glasses, goggles, or face shields when using grinders, saws, buffers, or hazardous chemicals or when taking part in any other activities that could cause eye injuries. ☐ Safeguard against falling objects from trees, such as limbs, branches, buckets, and scissors. ☐ Wear head protection (hard hats, bump caps) with proper eye protection or shields when welding or doing electrical work and when working in areas that are exposed to overhead hazards. ☐ Remove wristwatches and jewelry and secure long hair. ☐ Wear proper respirators for protection against atmospheres that may contain toxic gases, vapors, mists or inadequate oxygen. Such atmospheres may exist in grain vaults, manure pits, tanks, pipes, silos, vats, disposal pits, and equipment repair pits.

Caution: Do not enter a confined space (silo, bin, manure pit, etc.) *even to attempt a rescue* without specific equipment and approval unless you have been trained and have backup support. For more information, call your nearest Cal/OSHA Consultation Office and request a free copy of the *Confined Space Guide*.

Respiratory Protection (*Title 8*, Section 5144)—If the employer provides negative-pressure respirators, then a written respirator program must be developed and implemented. A respirator program is **NOT** required when disposable paper dust masks are provided for nose and mouth protection from nuisance dust. However, the employer is required to evaluate the levels of airborne contaminants when reasonably expected to go above the permissible exposure limit (PEL). The employer is always required to ensure that no employee is exposed over the PEL. The use of respirators is one way to protect employees from these kinds of exposure.







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When and where should respiratory protection be worn?

- □ When it is clearly impractical to remove dusts, fumes, mists, vapors, or gases at the source.
   □ When emergency protection against occasional or brief exposures is needed.

  In addition:
- ☐ Employees exposed to such hazards shall use respiratory equipment approved by the Mine Safety and Health Administration (MSHA) or by the National Institute for Occupational Safety and Health (NIOSH).
- ☐ Employees shall be instructed and trained in the need for and the use, sanitary care, and limitations of such equipment.
- Respirators for emergency use shall be inspected monthly and sanitized after each use.

**Note:** If employees use negative-pressure air purifying respirators for any reason, the employer must meet all the requirements of Section 5144. Please call the Cal/OSHA Consultation Service for advice when overexposure to contaminants is suspected.

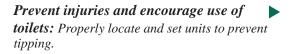
Storage of Hazardous Substances (*Title 8*, Section 5164)—Substances that react violently, evolve into toxic vapors or gases, have oxidizing components, or have high levels of flammability, explosiveness, or other dangerous properties shall be separated from each other in storage by distance, partition, or other means to prevent accidental contact.

**Note:** For specific information on pesticide use, contact the office of your county Agricultural Commissioner. Cal/OSHA does not regulate pesticide application. Copies of Cal/EPA fact sheets and forms **A-8** and **A-9** are provided in the last pages of Section 5 of this publication (please distribute to employees who handle pesticides).

Prevent accidents caused by falling objects: Train employees not to leave tools in trees and to be aware of others working around them.



Install air compressors and tanks properly: Units cannot be welded or bolted to tractor Rollover Protective Structure (ROPS).







**Prevent heat stress:** Encourage workers to drink water throughout the work day.



# S e c t i o n

# EMPLOYERS' OBLIGATIONS UNDER THE LAW— THE CAL/OSHA PROGRAM

The California Department of Industrial Relations administers the Cal/OSHA Program and the following cooperating units:

### Cal/OSHA Standards Board

Adopts, amends, or repeals occupational safety and health standards. The occupational safety and health standards are contained in the *California Code of Regulations, Title 8* (T8 CCR), "Industrial Relations."

# Cal/OSHA Appeals Board

Determines the facts concerning citations, penalties, and abatement dates that are appealed by employers and resolves disagreements between employers and the Division of Occupational Safety and Health (DOSH) Compliance.

# Division of Occupational Safety and Health (DOSH) Compliance

Enforces the provisions of the *Labor Code* concerning occupational safety and health and enforces *Title 8* standards as adopted by the Cal/OSHA Standards Board. DOSH may issue citations to and impose civil penalties on employers who violate safety or health standards. Safety engineers and industrial hygienists make inspections of work sites to determine whether there are conditions, work practices, machinery, tools, or equipment that violate *Title 8* sections. DOSH also investigates serious employee injury or illness.

### Cal/OSHA Consultation Service

Provides employers with free on-site consultations by professional safety consultants and industrial hygienists. The Consultation Service offers free advice and information on occupational safety and health. The Consultation Service does not issue citations or impose penalties. All on-site hazard findings are kept confidential.

# Hazard Evaluation System and Information Service (HESIS)

Provides bilingual information on hazards that are associated with particular substances or chemicals. HESIS also recommends exposure limits and precautions to take in using these substances or chemicals. For more information call (510) 622-4317 or fax (510) 622-4310.

# Targeted Industries Partnership Program (TIPP)

Consists of state and federal agencies that enforce employment laws in California's agricultural and garment-manufacturing industries. Participating State of California agencies include Cal/OSHA, Employment Development Department (EDD), Industrial Welfare Commission (IWC), Department of Motor Vehicles (DMV), Department of Health Services (DHS), and other local agencies. Participating Federal government agencies include the U.S. Department of Labor (DOL).

# Cal/OSHA District Offices (Compliance) Directory

Use this directory for employee assistance and for reporting accidents or complaints.

### Anaheim

2100 East Katella Ave., Suite 140 Anaheim, CA 92806 Phone (714) 939-0145 \*\*Maricela Jimenez

### **Bakersfield (Field Office)**

5555 California Avenue, Suite 200 Bakersfield, CA 93309 Teléfono (805) 395-2718 \*\*Roy Camacho

### **Chico (Field Office)**

1367 E. Lassen Ave., Suite B-4 Chico, CA 95973 Phone (530) 895-4761

### **Concord**

1465 Enea Circle, Bldg. E, Suite 900 Concord, CA 94520 Phone (925) 602-6517 \*\*Eric Berg

### **West Covina**

417 No. Azuza Avenue West Covina, CA 91721 Phone (626) 966-1166

# **Eureka (Field Office)**

619 Second St., Room 109 Eureka, CA 95501 Phone (707) 445-6611

### **Foster City**

1065 Hillsdale Blvd., Suite 110 Foster City, CA 94404 Phone (650) 573-3812

### Fresno

2550 Mariposa St., Room 4000 Fresno, CA 93721 Phone (559) 445-5302

\*\*Karen Crank

### Los Angeles

3550 West Sixth St., Room 431 Los Angeles, CA 90020 Phone (213) 736-3041 \*\*Chris Paley

### **Modesto (Field Office)**

1209 Woodrow Ave., Suite C-4 Modesto, CA 95350 Phone (209) 576-6260

### Oakland (New Office)

1515 Clay St., Suite 1301 Oakland, CA 94612 Phone (510) 622-2916 \*\*Garrett Brown

\*\*Garrett Brown
\*\*Lillian Pineda

### Pico Rivera

9459 East Slauson Ave. Pico Rivera, CA 90660 Phone (562) 949-7827 \*\*Miguel Vargas

### Redding

381 Hemsted Dr. Redding, CA 96002 Phone (530) 224-4743

### **Sacramento**

2424 Arden Way, Suite 165 Sacramento, CA 95825 Phone (916) 263-2800 \*\*Amalia Neidhardt

# San Bernardino

464 W. 4th St. Suite 332 San Bernardino, CA 92401 Phone (909) 383-4321 \*\*Alex Uriarte

### San Diego

7575 Metropolitan Drive San Diego, CA 92108 Phone (619) 637-5534 \*\*Aston Ling

\*\*Luis Ramon Mireles

### San Francisco

455 Golden Gate Avenue, 10th floor San Francisco, CA 94102 Phone (415) 703-5210

### San Jose

2010 North First St., Suite 401 San Jose, CA 95131 Phone (408) 452-7288 \*\*Carmen Hernandez

### Santa Rosa

1221 Farmers Lane, Suite 300 Santa Rosa, CA 95405 Phone (707) 576-2388 \*\*Mark Harrington

### **Torrance**

680 Knox St., Suite 100 Torrance, CA 90502 Phone (310) 516-3734 \*\*Mariza Cordeta \*\*Elsa Journey

### **Van Nuys**

6150 Van Nuys Blvd., Suite 405 Van Nuys, CA 91401 Phone (818) 901-5403 \*\*Rene Garcia-Caraballo

### Ventura

1655 Mesa Verde, Room 150 Ventura, CA 93003 Phone (805) 654-4581 \*\*Susana Freund

<sup>\*\*</sup> Indicates Spanish/English speakers who are available for bilingual assistance.

# Top 10 Cal/OSHA Violations in Agricultural Operations

# 1. Driverless Self-Propelled Equipment

(*Title 8*, Section 3441) This regulation covers all agricultural equipment, including tractors. Employers must have a tractor operator at the controls while the vehicle is in motion. The employer is required to ensure that if driverless tractors are used, they meet the following conditions:

- The equipment is furrow-guided.
- The operator has a clear view of other employees and the course of travel.
- Brake and throttle controls are within easy reach.
- The operator is within 10 feet of the controls and does not have to climb over or onto equipment to reach the controls.
- The equipment is not traveling at a speed of over two miles per hour.

# Machine Guarding Gears, Sprockets, Chains, and Power Take-Off (PTO) Shafts

(*Title 8*, Section 3440) Employers are required to guard the nip points of all power-driven gears, belts, chains, sheaves, pulleys, sprockets, and idlers. Power take-off (PTO) shafts also must be guarded.

### 3. Hazard Communication

(*Title 8*, Section 5194) Employers must have written guidelines informing employees of how to protect themselves from hazardous chemicals used in the workplace. This includes container labeling, employee training, use of material safety data sheets, and an inventory list of hazardous chemicals present on the site.

# 4. Lockout/Tagout

(*Title 8*, Section 3314) Employers must have a program that trains employees who repair, service, clean, or adjust machinery (or such equipment as pneumatic cutters) to protect themselves from unexpected energization or start-up of machinery.

### 5. Guardrails on Elevated Work Areas

(*Title 8,* Section 3210) Employers must provide guard railing on all walkways, platforms, balconies, porches, and working levels more than thirty inches above the floor, ground, or other working levels.

# 6. Forklifts, Industrial Tow Tractors, and Agricultural Tractors

(*Title 8*, Section 3664) Only drivers who are authorized by the employer and have been trained in the safe operations of industrial trucks shall be permitted to operate these vehicles.

# 7. Injury and Illness Prevention Program (IIPP)

(*Title 8*, Section 3203) A written IIPP must be implemented and maintained. It must meet the eight requirements for preventing injuries and illnesses in the workplace.

# 8. First Aid Training and First Aid Kits

(*Title 8*, Section 3439) There shall be at least one employee trained in emergency first aid for every 20 employees at any "remote location" (more than a 15-minute drive to an emergency care facility). The employer must provide a first aid kit at every work site and have a means of communication.

# 9. Reporting Work Fatalities and Serious Accidents Within 8 Hours

(*Title 8*, Section 342) Immediately report by phone or fax to the nearest Cal/OSHA District (Compliance) Office any serious injury, illness, or death of an employee in the workplace.

### 10. Field Sanitation

(*Title 8,* Section 3457) Employers must provide potable drinking water and single-use drinking cups. Toilet and hand washing facilities shall be located within 1/4 mile or a five-minute walk from the work site. Facilities must be maintained in a sanitary condition. Soap and single-use towels shall also be provided.

# A Precautionary Note to Owners and Lessors of Equipment or Land

Any person who provides equipment for use by employees should ensure that the equipment provided is in safe condition. Similarly, an owner or lessor of land where employees will be working should ensure that adequate information about existing hazards on the land is provided to those employees who may encounter them (for example, powerlines, irrigation canals, etc.).

# Agricultural Posting Requirements

There are a number of posters and leaflets that are required to be posted at agricultural work sites. To obtain these materials, call the phone numbers listed below or your worker's compensation carrier.

- Wages, hours, and working conditions in agricultural occupations (Wage Order 14-80). Telephone (415) 557-7878.
- Wages, hours, and working conditions in industries involving handling products after harvest (Wage Order 8-80). This applies to wineries, fresh fruit and vegetable packing companies, and cotton gins. Wage Order 3-80 covers employers who can, freeze, or otherwise process and preserve agricultural products. Telephone (415) 557-7878.
- 3. Preparing agricultural products on the farm for market (Wage Order 13-80). This covers farm processing products that are grown at the same site. If the grower prepares products for market for other growers, Wage Order 8-80 applies. Telephone (415) 557-7878.
- 4. *Pay Day Notice* (DLSE 8). This form states employees' regular pay days and times and the place of payment. Telephone (415) 557-7878.

- 5. Workers' Compensation Notice. This notice must be posted where it can be read during work hours and must be available in Spanish. Contact your worker's compensation insurance carrier to obtain this poster.
- Rate of Pay Notices. Farm labor contractors (FLC) must display this information in English and Spanish at the work site and on all vehicles used by the FLC to transport employees.
- 7. Your Rights—Federal Minimum Wage,
  WH-1088 (English) and WH-1088S
  (Spanish); Employee Polygraph Protection
  Notice, WH-1462 (English) and WH1462S (Spanish). Employers with 50 or
  more employees must post Family and
  Medical Leave Act, WH-1420 (English)
  and WH-1420S (Spanish); MSPA notice
  (Migrant and Seasonal Agricultural
  Worker), WH-1376; MSPA Worker
  Information, WH-516; MSPA Housing
  Terms and Conditions, WH-521; and

- *Pregnancy Disability Leave,* Notice A. Telephone (916) 979-2040 in Sacramento; (213) 894-2700 in Glendale.
- 8. Safety and Health Protection on the Job, to be posted at the location(s) where employees work; Access to Medical and Exposure Records, S-11 (English) and S-11S (Spanish); Emergency Phone Numbers, S-500; Operating Rules for Industrial Trucks and Forklifts, S-503 (English) and S-503S (Spanish); and All Tractors Farm and Industrial, S-504 (English) and S-504S (Spanish). Telephone Cal/OSHA at (415) 972-8844.
- Cal/OSHA Log 200. Posted from February 1 until March 1 each year. (This is not required if you have 10 or fewer employees.)
- 10. Field sanitation handwashing facilities must be posted with sign indicating "Water is for handwashing only."
- 11. *Employee Housing Act* (HCD-206). This poster is for housing facilities with permits to house five or more workers. Telephone (916) 445-9471.
- 12. Notice to Employees of Unemployment
  Insurance and Disability Insurance. Ask for
  the poster, For Your Benefit, DE-1857AS,
  brochure DE-2515 (English) and
  DE-2515S (Spanish). State Disability
  Insurance must be given to new
  employees and employees leaving work
  because of a nonoccupational disability or
  pregnancy. DE-2320 (English) and
  DE-2320S (Spanish) must be supplied
  to each person at the time he or she
  becomes unemployed. Telephone (916)
  322-2835 or contact your local EDD
  office.
- 13. Discrimination in Employment is
  Prohibited by Law, DFEH-162 (English)
  and DFEH-162S (Spanish); and Sexual
  Harassment is Forbidden by Law,
  DFEH-185 (English) and DFEH-185S

- (Spanish). Mail a self-addressed envelope to DFEH Communication Center, 2014 T St., Suite 210, Sacramento, CA 95814-5212, or visit a local DFEH office.
- 14. Equal Employment Opportunity Is the Law. Available in English and Spanish. Telephone (800) 669-3362.
- 15. *Time Off to Vote.* Post at least 10 days before each statewide election through election day. Contact your local workers' compensation insurance carrier for copies.
- 16. Pesticide Application—Specific Information,
  Hazard Communication Information for
  Employees Handling Pesticides. Hazard
  Communication Information for Employees
  Working in Fields, PSIS A-9. English and
  Spanish versions are available from your
  county Agricultural Commissioner's
  office.
- 17. Cal/OSHA Hazard Communication regulation requires the employer to make Material Safety Data Sheets (MSDS) available to employees and provide training for users of chemicals. Follow *CCR*, *Title 8*, Section 5164, and follow instructions in the MSDS. Telephone 1-800-963-9424.
- 18. Notice to agricultural workers with minor children must say, "NOTICE: Minor children are not allowed to work on these premises unless they are legally permitted to do so by law and work permit has been secured by minor."

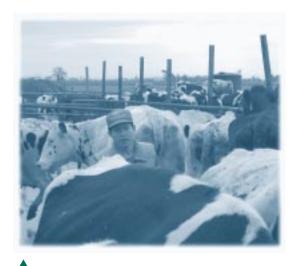
**Note:** Information was provided by Steve Sutter, Farm Advisor, Central Valley University of California Cooperative Extension Service.



**Prevent fall accidents:** Keep good footing and posture while prunning or picking.



**Prevent being struck by tools:** Never leave tools hanging on tree branches.



**Prevent livestock injuries:** Train employees in animal handling and in emergency situations.



**Prevent injuries by tools:** Ensure tools and equipment are properly stored and maintained.

## FACT SHEETS AND CHECKLISTS

Use the following fact sheets and checklists when conducting safety meetings and training sessions. Instructions should be given before the crew members begin work. Make extra copies of these pages, distribute them, and make sure that all employees and supervisors understand them.

The safety topics presented here were chosen from the agricultural operations that have experienced the highest number of fatal, serious, and disabling accidents. Conducting good hazard-finding inspections and correcting identified hazards can prevent accidents. Remember to:

- Train and educate all workers and supervisors about their job's hazards.
- Continue to improve the safety of work areas by conducting regular inspections. Follow up by correcting any hazards.

The following fact sheets, brochures, and checklists are provided in this section:

- **▼** Farm Machinery Safety
- **▼** Farm Vehicle Safety
- **▼** Protecting Workers from Heat Stress
- **☑** Back Safety on the Farm
- **☑** Installing Rollover Protection Structures (ROPS) on Tractors
- **W** Water and Sanitary Facilities in the Field
- **✓** Orchard Inspection
- **✓** Irrigation Inspection
- **▼** Tractor Safety
- **▼** Tractor Pre-Operation
- **▼** Targeted Industries Partnership Program (TIPP) Checklist
- **✓** Worker Training and Instruction Record
- **☑** Safe Work Practices by Job Classification
- ✓ PSIS A-8 and PSIS A-9 (required pesticide safety information from Cal/EPA)



Prevent vehicle accidents:
Operate all vehicles at safe speeds
and be aware of your surroundings.



Prevent heat stress: Encourage workers to drink water throughout the work day.





#### Attention!

We encourage you to give these checklists and fact sheets to all employees and to encourage supervisors to use each fact sheet to conduct safety meetings. You can use plastic page protectors or laminate the sheets to protect them from water. We also suggest that you include these checklists in each bus or van.









Use these checklists as your tools for accident prevention.



## **Farm Machinery Safety**

#### Many serious injuries occur during maintenance!

Workers often get caught in such power transmissions as belts and pulleys, running rolls, or chains and sprockets. Sometimes workers reach past guards; other injuries occur when equipment is left unguarded or when machinery starts up unexpectedly. Detailed information about machinery safety is provided in the owner's manual provided with every piece of equipment. If you do not have the manual for a piece of equipment, contact the manufacturer to request a copy.

## Common tasks involving risk:

- · Cleaning a jammed conveyor
- · Making quick adjustments
- Adjusting and cleaning pneumatic cutters
- Retrieving a dropped object
- · Reaching for a wrench

## How can you protect your workers?

- Train workers on machine hazards.
- Provide machine guards.
- Paint guards and points of operation in bright, contrasting colors. This gives workers a visual warning and makes missing guards easier to spot.
- Ensure that guards remain in place.
- Establish and follow electrical safety work practices.
- Ensure that equipment is turned off and locked out during maintenance.
- Remember that factors such as fatigue, medication, alcohol, and stress can negatively affect a worker's ability to fully stop equipment.
- Remember that safety awareness is the key to preventing farm machinery accidents.

## Major hazards presented by farm machinery:

Shear points are created when the edges of two objects move toward or next to each other closely enough to cut relatively soft material. Examples include sickle bars, forage harvester heads, and grain augers.

Pinch points are created when two objects move together and at least one of them is moving in a circular motion. Examples include belt and chain drives, feed rolls, and gear drives.

Wrap points include any exposed, rotating machine components. Injuries usually occur when loose clothing or long hair catches on and wraps around rotating shafts or protruding shaft ends.

Crush points are created when two objects move toward each other or when one object moves toward a stationary object. Avoid getting into a position that could lead to body parts becoming crushed.

Objects, including stones, sticks, and other debris, can be thrown by machinery and seriously injure bystanders or animals nearby. Guards and deflectors can reduce this hazard.

Pull-in points can occur when a worker tries to remove material that has become stuck in feed rolls or other parts while a machine is still operating. Once the material is freed, it can pull the person into the machine faster than he or she can let go!

Free-wheeling parts can catch fingers or other body parts. The heavier a revolving part is, the longer it will continue to rotate after the power is shut off. Allow time for blades, flywheels, and various other rotating components to come to a complete stop before attempting to clean or adjust a machine. This may require waiting a minute or more.

Springs are often a source of potentially dangerous stored energy. If possible, release spring tension before dismantling equipment. Stay away from the direction of the spring's travel.

Hydraulic systems store a considerable amount of energy under extremely high pressure. Equipment should be blocked before maintenance procedures are carried out. Never check leaks with your hands; instead, use a piece of cardboard. A fine jet of hydraulic fluid can readily pierce the skin.

## Other important things to keep in mind:

- Machines must be shut down before maintenance and whenever jams need to be cleared.
- Lockout/tagout procedures must be established and followed so that machines remain off while they are undergoing maintenance.
- Electrical safety work practices must be followed at all times.







## Motor vehicle accidents claim the highest number of injuries in agriculture!

# 47 percent of agricultural injuries in California are caused by motor vehicles.

#### **Facts and statistics:**

In 1991, 238 deaths resulted from pickup trucks transporting passengers on a flatbed.

Thousands of farm vehicles are involved in accidents on public roads in the United States each year.

- · Rear-end collisions are common.
- Accidents between tractors and other slow-moving farm equipment and cars or trucks occur on dry, open highways during the day.

## Why do these accidents

- Difference in speed between cars or trucks and slow-moving farm machinery
- Operators driving too fast, especially when turning or pulling a heavy load
- Drivers drifting partially over the center line
- Drivers running into a tree or other fixed object
- Young and inexperienced drivers
- Fatigue and bad weather conditions, including fog, rain, and wind

## Prevent accidents by improving safety on the roads!

- Follow traffic laws, including minimum speed, signaling, signs, and allow other vehicles to pass.
- · Wear a seat belt if one is provided.
- Look out for potential hazards such as soft shoulders, narrow rights-of-way, loose gravel, bumps, potholes, and deep ruts.
- Avoid traveling on public roads after dark.
- Slow down on turns, on curves, and when pulling a heavy load.
- Pull off the road to let traffic pass if the shoulder is wide and smooth.
- Enter the road very slowly if your view is obstructed.

#### Other driving safety DOs:

- · Always drive defensively.
- Secure hitches and loads ahead of time.
- Stay to the right.
- Keep your eyes on the road and on other traffic.
- Remember that slow-moving vehicles (SMVs) travel at 25 miles an hour or less.

#### **Driving safety DON'Ts:**

 Don't operate farm machinery without an SMV emblem affixed.

- Don't operate a tractor or vehicle if you have been drinking alcohol or are taking medication that makes you sleepy or sluggish.
- Don't drive down a hill in high gear with a heavy load.
- Don't allow passengers or children to ride on tractors under any circumstances.

## Slow-Moving Vehicle Checklist

- Check hitch connections, including locking devices.
- Check the load. Make sure it's secure, balanced, and equipped with good brakes.
- ✓ Make sure that the SMV emblem is clean, unfaded, and properly affixed.
- Check lights, tires, transmission fluids, wipers, and brakes.
- ✓ If you have any doubts or notice an operational defect, let your supervisor know.
- Circle check your vehicles each day.

Provided by the Department of Justice, Division of Law Enforcement, Statistical Analysis Center, 1991.





## **Protecting Workers From Heat Stress**

There are four environmental factors that can cause heat stress in a hot work area. These are (1) temperature; (2) radiant heat from the sun or a furnace; (3) humidity; and (4) air velocity. The level of heat stress a person encounters depends on his or her age, weight, level of fitness, medical condition, and acclimatization to the heat. Heat stress occurs when body muscles are being used for physical labor and less blood is available to flow to the skin and release the heat. For more detailed information, a 15-page booklet titled *Working in Hot Environments* is available from the National Institute for Occupational Safety and Health (NIOSH), 4676 Columbia Parkway, Cincinnati, Ohio 45226; telephone (800) 356-4674

## What are some of the risks of heat stress?

- Rise in body temperature and heart rate
- Loss of concentration and difficulty in focusing on a task
- · Increased irritability or sickness
- · Little or no desire to drink
- Fainting and possible death if person is not removed from the source of the heat stress

## How can you reduce the risk of heat stress?

- Provide water and encourage employees to drink (this helps to replace fluids lost through sweating).
- Train and educate workers to recognize heat stress symptoms.
- Train first aid workers to recognize and treat heat stress disorders.
- Ensure that the names of staff trained in first aid are known to all workers.
- Encourage employees to move to a cooler place, find shade, and rest during their breaks.
- Allow employees to slow the work pace or reduce the work load and to stop and rest if they become extremely uncomfortable.
- Encourage employees to wear appropriate clothing (cotton garments) and to use sunscreen, hats, and sunglasses.

 Be aware that older workers, obese employees, and people on medication are at greater risk for heat stress.

## What are some of the symptoms of heat stress?

HEAT STROKE, the most serious health problem for workers in a hot environment, is caused by the body's failure to regulate its core temperature. Sweating stops and the body can no longer release excess heat. Victims of heat stroke usually die unless treated promptly. Signs include:

- Mental confusion, delirium, loss of consciousness, convulsions, or coma
- Body temperature of 106° F or higher
- Hot, dry skin that may be red, mottled, or bluish

How can heat stroke be treated? Prompt first aid can prevent permanent injury to the brain and other vital organs. While awaiting medical help, the victim should be moved to a cool area. The victim's clothing should be soaked with cool water and he or she should be fanned vigorously to increase cooling.

HEAT EXHAUSTION results from loss of fluid through sweating and from not drinking enough replacement fluids. The worker still sweats but experiences extreme weakness or fatigue, giddiness, nausea, or headache. The skin is clammy and moist, while body temperatures are normal or slightly elevated.

How can heat exhaustion be treated? The victim should rest in a cool place and drink water or an electrolyte solution, such as Gatorade or similar beverages used by athletes to restore potassium and salt. Severe cases, in which the victim vomits or loses consciousness, may require longer treatment under medical supervision.

HEAT CRAMPS, painful spasms of the muscles, are caused by the body's loss of salt.

How can heat cramps be treated? As in the case of heat exhaustion, a victim of heat cramps should drink an electrolyte solution such as Gatorade. Seek medical attention for the victim in the case of severe cramping.

FAINTING can occur when a worker is unacclimatized to a hot environment.

How can fainting be treated? At first, allow the victim to lie down on his or her back. When consciousness has been regained, the victim should usually recover after a brief period of walking around slowly.

HEAT RASH, also known as prickly heat, can be extensive and can be complicated by infection. Heat rash can be so uncomfortable that sleep is disrupted. It can impede a worker's performance and can even result in a temporary total disability.

How can heat rash be treated? Place the victim in a cool place and allow the skin to dry.

Information contained in this fact sheet was obtained from U.S. Department of Labor Fact Sheet No. OSHA 93-16. This fact sheet provides a general description only and does not carry the force of legal opinion.







## **Back Safety on the Farm**

About eight out of ten people suffer from lower back pain. For agricultural workers in particular, long hours of heavy lifting, bending, or stooping can lead to back pain or serious injury. You can keep your back healthy and pain-free by remembering some of the SHOULDS and SHOULD NOTS of back safety.

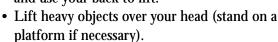
## When Lifting You should . . .



- Decide whether you can lift and carry the load safely. If the load is too heavy, get help from another person or use a mechanical device, such as a forklift, jack, or hand truck.
- · Always bend your knees and lift with your legs!
- Keep the load close to your body.

#### You should not . . .

- Try to lift or carry heavy objects alone.
- Bend forward at the waist and use your back to lift.



 Twist your back (by moving your feet to change directions).

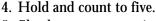
A variety of back exercises are presented below for your consideration. Select those that you and your doctor feel are appropriate for your physical status and needs.

#### To help relax a stiff back and hips:

- 1. Lie flat on your back.
- 2. Raise your right knee to your chest
- 3. Hold and count to five.
- 4. Repeat five times.
- 5. Repeat steps 1–4 with left leg.
- 6. Repeat steps 1–4 with both legs.

#### To strengthen abdominal muscles:

- 1. Lie flat on your back with your knees bent.
- 2. Slowly raise your head and neck to the top of your chest.
- 3. Reach both hands forward and place on your knees.



- 5. Slowly return to starting position.
- 6. Repeat five times.

*Note:* Keep your head in line with your shoulders.

#### To strengthen abdominal muscles:

- 1. Lie flat on your back with your knees bent.
- Firmly tighten your buttock muscles.
- 3. Hold and count to five.
- 4. Relax buttocks.
- 5. Repeat five times.



Note: Keep your lower spine flat against floor.

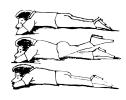
## To strengthen hip, buttock, and back muscles:

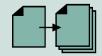
- 1. Lie flat on your stomach.
- 2. Straighten and stiffen your left leg.
- 3. Slowly raise your leg from the hip
- 4. Return your leg to the floor.
- 5. Repeat five times.
- 6. Repeat steps 1–5 with right leg.

*Note:* Don't lift your pelvis while raising your leg. Keep your leg straight.

# When Working Close to the Ground You should...

- Get down on one or both knees.
- · Wear pads to protect your knees.









 Stand up and stretch your back muscles occasionally. Put your hands on your hips and bend backward. Hold for about 30 seconds.

#### You should not . . .

- Bend or stoop over at the waist. This strains your lower back.
- Work in the same position for a long period of time.



## When Standing for Long Periods *You should* . . .

- Stand with one foot resting higher than the other.
- Change the position of your feet occasionally.
- Wear comfortable shoes.
- Stand on a comfortable surface, such as a piece of carpet, rug, or other cushioned material.

#### You should not ...

- Stand in the same position for a long period of time.
- Wear uncomfortable, highheeled, or platform shoes.
- Bend forward on straight legs.



## When Sitting or Driving *You should* . . .

- Adjust the seat so that your knees are level with your hips.
- Sit up straight.
- Support your lower back with a small cushion or a rolled-up towel.
- Take short rest breaks to walk and stretch.



#### You should not . . .

- Slump or slouch over.
- Stretch for the gas pedals or steering wheel.
- Sit in seats that are too high or too low.

#### Maintaining a Healthy Back Through Posture, Diet, and Exercise

Besides the strains and sprains that can result from lifting, bending, and sitting, there are a number of other causes of back pain. These include having poor posture, being overweight, and failing to get enough exercise.

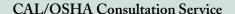
Poor posture puts more strain on your back and increases the chance of injury. A casual slouching posture puts pressure on the natural curves of your back. Keep the natural curve of your back by standing tall and not slouching.

Being overweight increases back strain because of the added weight your back must support.

Proper exercise will strengthen the muscles that support your back. These muscles include the ones in your back, stomach, and hips. You should:

- Loosen and warm up your body for a couple of minutes before exercising.
- Exercise every day! Thirty minutes each day is all you need—preferably 15 minutes in the morning and 15 minutes at night.
- Be careful not to overdo it when you first start exercising. If the exercise causes pain, see your doctor.





Information contained in this fact sheet was obtained from the CalWellness Foundation. This fact sheet provides a general description only and does not carry the force of legal opinion.





# **Installing Rollover Protective Structures (ROPS) on Tractors**

#### **Installing ROPS can save lives!**

Tractor accidents are the most tragic and common cause of agricultural work-related injuries; such accidents very often result in fatalities. A 1994-95 study revealed that 15 fatalities in California involved tractor runovers and rollovers.

According to UC Davis Farm Safety
Program Director Dr. William E. Steinke, the
use of a rollover protective structure (ROPS)
does not prevent a tractor from overturning,
but when it is used in conjunction with a seat
belt, an ROPS is 99.9 percent effective in
preventing a fatality in the event of an
overturn. Operators and owners are urged to
follow safe operating practices when using
tractors and other farm equipment.

Common excuses for not retrofitting an older tractor with an ROPS include:

- Fear that it will interfere with tractor usage
- Cost
- · Lack of information about availability

#### **Facts**

- About two-thirds of all tractors currently in use are older machines that do not have ROPS!
- Foldable ROPS are available for use in tight areas such as orchards or barnyard areas (removal is not recommended because overturns are more likely to happen in these areas).
- ROPS retrofitting program costs range between \$250 and \$600. This is a small price to pay compared to the cost of an injury or death.
- The ROPS and the tractor must function together as a unit and the tractor must have the structural integrity to support an ROPS. Do not attempt to fabricate your own ROPS.

#### How do runovers occur?

Sometimes tractor drivers allow passengers to ride on the tractor even though Cal/OSHA regulations prohibit this practice. Riders without seats or seat belts can fall off the tractor and be run over.

Other runover incidents have occurred when the tractor driver was unable to clearly see workers in the field because they were hidden by tall weeds or crops.

#### How do rollovers occur?

A rollover can occur even if most of your tractor operations are on flat land. Accidents can occur at ditches and banks at the edge of fields and along rural roads. Rear overturns can occur when an attempt is made to pull something that is improperly hitched to the tractor.

#### **Tractor ROPS manufacturers**

The National Farm Medicine Center has a directory, A Guide to Tractor Roll Bars and Other Rollover Protective Structures. This directory includes tractor manufacturers' names, addresses, phone numbers, tractor models, ROPS types, and manufacturers' suggested prices. To obtain a copy of this directory, send \$2.50 for handling to the National Farm Medicine Center, 1000 North Oak Avenue, Marshfield, WI 54449-5790. You may also fax orders to (715) 389-4950 or order by e-mail (alswagej@mfldclin.edu)

Local tractor manufacturers or distributors are listed in the yellow pages of your area telephone directory.







## Water and Sanitary Facilities in the Field

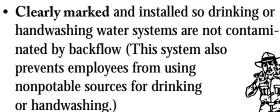
According to California law and federal law, employers must provide water for drinking, water for handwashing, and toilet facilities for their workers in the field. The laws also require employers to notify each worker of the location of water and toilet facilities and to allow the workers reasonable opportunities during the work day to use the facilities.

#### **Drinking water must be:**

- Fit to drink (potable), suitably cool, in adequate supply, and readily accessible to all workers
- In dispensers that are kept clean
- In dispensers not located in toilet rooms
- In dispensers that are equipped with faucets or fountains
- Dispensed using single-use/disposable drinking cups, not dippers

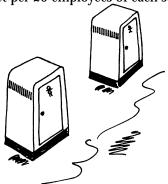
#### Handwashing facility must be:

- Furnished adequately with potable water
- Supplied with soap
- Supplied with single-use towels



#### **Toilet facilities must be:**

 Separate for males and females, with 1 toilet per 20 employees of each sex



(Exception: If there are fewer than five employees, separate toilets may not be required as long as the toilet room can be locked from the inside.)

- Kept clean and in good working order
- Supplied with adequate toilet paper



- Accessible to employees at all times; where possible, toilets are near the work site (near = 1/4 mile or 1,320 feet or a 5-minute walk, whichever is shorter)
- Located where all water-carried sewage is disposed of in a manner that shall not endanger the health of the workers

Provided by an Outreach Project of the UC Davis Agricultural Health and Safety Center. Supported by NIOSH Cooperative Agreement No. U05/CCU906055/02.

For more thorough information about these Cal/OSHA field sanitation laws, please contact your County Agricultural Commissioner.







# Orchard Inspection Checklist Will Help You Find Workplace Hazards

#### HOW TO USE YOUR CHECKLIST— AS EASY AS 1, 2, 3

- 1. Select the portion of the following checklist that corresponds with the type of activity being evaluated:
  - Ladders
  - Toilet facilities
  - · Drinking water
  - · Orchard hazards
  - Machinery and equipment
  - Training of farm workers
- 2. Fill out the checklist for each type of activity you wish to evaluate. Simply place check 
  marks in the appropriate rows and columns. Make additional copies of the checklist
  when needed. Observers or employees performing the task can fill out the checklist.
- 3. Make sure that *typical* work practices and equipment are being evaluated. Watch individuals long enough to evaluate any changes in work activities. Observe different employees performing the same job. Save your results for review when you are considering improvement options.

After your evaluations, review your results and list the five activities you found to occur most frequently:

1	
5	

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		1	

INCRECTION ITEM	Comments			
INSPECTION ITEM	ОК	Needs attention	Date when corrected	
Ladder inspection:				
Rungs				
Rivets				
Steps				
Bolts, etc.				
Toilet facilities:				
Clean toilet				
Toilet paper				
Soap, hand towels				
Handwashing water				
Lock inside				
Adequate number of toilets				
Drinking water:				
Adequate supply				
Single-use cups				
Cool temperature				
Orchard hazards:				
Power lines				
Ditches, canals				
Road hazards				
Machinery and equipment:				
Guards				
Electrical warning devices (horn, lights)				
Brakes				
Wheels				
Other (bearings, etc.)				
Inspected by:				
Date of Location				
You can use this checklist to help check off training session			_	





Training topics that you should cover for farm workers working in orchards	Crew has received train		
	Yes	No	
Safety meeting			
New/returning workers			
Change in equipment/work			
Field sanitation			
Safe code for work practices			
Lifting			
Operating equipment			
Avoiding storing metal ladders under high voltage lines			
Chemical storage			
Lockout — unjamming			
Housekeeping			
Heat stress			
First aid			
Personal protection equipment			



# Irrigation Inspection Checklist

## HOW TO USE YOUR CHECKLIST—AS EASY AS 1, 2, 3

1. Select the portion of the following checklist that corresponds with the type of activity being evaluated:

#### Irrigation Procedures/Equipment

- · Gravity flow
- Sprinkling system
- Valves/pipes

#### **Safe Work Practices**

- · Handling and lifting
- Personal protection equipment
- Safeguards

#### **Field Sanitation**

- Vehicles and equipment
- Training of farm workers
- 2. Fill out the checklist for each type of activity you wish to evaluate. Simply place check ✓ marks in the appropriate rows and columns. Make additional copies of the checklist when needed. Observers or employees performing the task can fill out the checklist.
- 3. Make sure that *typical* work practices and equipment are being evaluated. Watch individuals long enough to evaluate any changes in work activities. Observe different employees performing the same job. Save your results for review when you are considering improvement options.

After your evaluations, review your results and list the five activities you found to occur most frequently:

1		
 5.		





	Comments			
INSPECTION ITEM	OK	Needs attention	Date when corrected	
Gravity flow:				
Flood gates (use two hands to lift)				
Shovels (use two hands)				
Porthole plugs (stand to side when removing)				
Sprinkling system:				
Collar clams (use of snap lock or wrench)				
Self-propelled wheel line sprinklers (no smoking, block wheels, start engine, and adjust controls)				
Sprinkler heads, drive chains				
Pumps:				
Pump motor (check motor and components before starting)				
Pump valves				
Shovels (bend knees when filling holes and embankment openings)				
Handling valves:				
Valve connectors (check each pipe section)				
Bend knees and keep back straight				
Avoid standing in front of valves				
Wear gloves when required				
Wear eye/face protection when required				





IN ISBECTION LITERA	Comments			
INSPECTION ITEM	OK	Needs attention	Date when corrected	
Pipe plug:				
Because of water pressure, use caution when connecting last pipe				
Keep hands clear to avoid pinch hazard				
Field sanitation:				
Handwashing before/after using restroom				
Drinking and handwashing water available				
Location of toilets				
Clean toilets and washing facilities with soap, towels, and sign				
Vehicles and equipment:				
Brakes				
Warning devices (horn)				
Guards and covers (PTO, ROPS)				
Lines/connectors (fuel, air)				
Other				
Inspected by:  Month of  Location				

You can use this checklist to help check off training sessions and inspections as they are done.





### Crew has received training Training topics that you should provide for farm workers doing irrigation work No Safety meetings New/returning workers Change in equipment/work Field sanitation Safe code for work practices Lifting Operating equipment Avoiding storing metal ladders, tubes, and pipes under high-voltage lines Chemical storage Lockout — unjamming Housekeeping Heat stress First aid Personal protection equipment Use of tools

## **Tractor Safety**

#### **Before You Start the Tractor**

Before operating a tractor, complete these important safety checks.

#### **Personal Safety Checklist**

Before you begin, make sure that you can answer "yes" to all the questions on the Personal Safety Checklist.



#### **Tractor Operation Checklist**

Thoroughly inspect the tractor before using it. Use the checklist.

#### **Review Operator's Manual**

Familiarize yourself with the tractor. The manual explains the special features of the tractor, how to operate it, and necessary safety precautions for avoiding injuries. Keep the manual where you and others can always find it. Review it frequently.

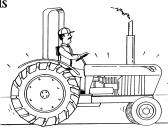
#### **Operate a Clean Tractor**

Keeping a tractor clean prolongs the life of the machine. It also makes servicing and identification of hazards or needed repairs easier.

#### **Check Shields and Guards**

Make sure that all shields and guards are tight and in place. The power takeoff (PTO) shafts and belts can entangle and amputate limbs.

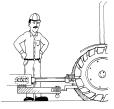
Hot radiator and hydraulic lines should



have guards to protect workers from severe burns.

#### Starting the Tractor

Remember, if you answered "no" to any questions on the Pre-Operation Checklist, DO NOT start the tractor.



#### **Use Handrails**

Use handrails while getting on and off the tractor. Handrails provide support and prevent slipping. Keep the handrails clean.

#### **Adjust the Seat**

Adjust the seat so that you can reach the controls easily. Snap on the seat belt if the tractor has a rollover protective structure (ROPS). The seat belt will hold you in place if the tractor rolls over. The ROPS must be federally approved.

## **Check Control Lights and Gauges**

Make sure that lights and gauges are working properly.
This allows you to monitor temperatures and pressures for safe operation of the tractor. Replace any non-working lights or gauges immediately. DO NOT operate a tractor without these devices.

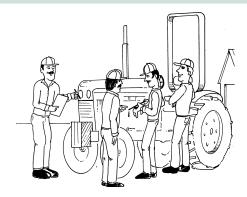
#### Start Indoors Only When Ventilation Is Adequate

Open windows and doors to allow air to circulate. Exhaust fumes are toxic and can cause serious injury or death.

The information contained in this fact sheet was obtained from the Safety and Hazard Awareness Training for Agricultural Workers: An Outreach Project of the UC Agricultural Health and Safety Center, Applied Behavioral Sciences and Agricultural Engineering Departments of University of California, Davis, CA 95616. Supported by NIOSH Cooperative Agreement No. U05/CCU906055-02





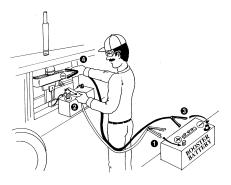


#### **Start Tractor from the Seat**

Start the tractor only when you are seated. Never start it while standing on the ground and never bypass–start the tractor. Workers have been run over and killed when the tractor suddenly jumped. Before turning the key, put the gear-shift lever in park or neutral. Place all hydraulic controls in neutral. Disengage all hydraulic components that operate when the engine is running. Look around before starting to make sure that no one is standing behind or beside the tractor.

#### **Crank the Engine**

To start the engine, first depress the clutch and put the transmission in neutral or park. Depressing the clutch disengages the engine from the transmission. Apply both brakes evenly so that the tractor won't jump or roll. Crank the engine for 10 to 30 seconds. Refer to the operator's manual if necessary.



## **Troubleshooting Hard-to-Start Tractors**

#### **Starting Fluid**

Some diesel tractors are difficult to start in cold weather. Refer to the operator's manual before you use starting fluid. When using starting fluid, crank the engine 10 to 20 seconds until smoke comes from the exhaust. Then, inject starting fluid into the engine airintake system and continue to crank the engine. Starting fluid is highly flammable—flames or sparks must be avoided. Do not smoke while using starting fluid.

#### **Jumper Cables**

First check the operator's manual for precautions. Sparks from a jumper cable touching a battery post can ignite the explosive hydrogen gas produced by batteries.

To use cables, first connect one cable to the positive post of the booster battery and then attach the other end to the positive post of the dead battery. Attach the other cable to the negative post of the booster battery and the other end to the engine block of the tractor.

When cables are in place, start the vehicle with the booster battery. Then crank the engine of the tractor. If the tractor does not start, refer to your operator's manual. When the tractor has started, remove the jumper cables in the reverse order in which they were installed.

#### **Mounted Air Compressors and Tanks**

Any exposed v-belts must be guarded. A permit from Pressure Vessels is required if the tank is larger than 1.5 cubic feet or has more than 150 psi.





## Tractor Pre-Operation Checklist



	Yes	No
Personal safety — Are you, as the operator:		
In good health? Feeling well and alert?		
Wearing snug-fitting clothing?		
Wearing long hair tucked under a cap?		
Wearing no jewelry (chains, bracelets)?		
Wearing safety glasses when required?		
Wearing ear protection when required?		
If you answered "no" to any of these questions, DO NOT use corrections or report them to your supervisor.	e the tractor. Make	the necessary
Tractor operation:		
Hydraulic fluids and crankcase oil: Are they clean, full, and free of leaks?		
Air cleaner: Is it in place, clean, and undamaged?		
Battery: Is the fluid level correct; are terminals clean?		
Radiator: Is coolant level correct; free of leaks; cap fits properly?		
Ignition wiring: Is it clean with no breaks in insulation?		
Exhaust system: Is it sound and leak-free?		
Steering: Are connections tight?		
Grease fittings: Are they clean, operable, and lubricated?		
Wheel bolts: Are they tight and unbroken?		
Tires: Is air pressure correct; are tires in place and in good condition?		
Power takeoff shields and safety guards: Are they in place and in good condition?		
Hitch: Are pins and bolts in place?		
Attached or mounted equipment: Is it securely fastened; are hitch pins correct size; are sway blocks properly adjusted?		





## Tractor Pre-Operation Checklist - continued

	Yes	Nb
Handrails, steps, platform: Are they clean and in good condition?		
Brake pedal: Is locking device functioning and are brakes properly adjusted?		
Fuel supply: Is the tank full and the filler cap tightened and free of leaks?		
Fire extinguisher: Is it charged and easily accessible?		
First aid kit: Is it fully stocked and accessible?		



## Worker Training and Instruction Record – Page 1

NAME OF COMPANY:

**EMPLOYEE ID# OR SS#:** 

**EMPLOYEE NAME:** 

Each time that training is completed for one of the items on this list, the employee, the trainer, and/or the supervisor will initial and date the training that was received.

REMEMBER! When the job is performed, the supervisor or foreman must see that the employee is working in a safe manner and is supervised in the job to be performed. The supervisor or foreman must also see that all necessary safety equipment is supplied and used and that all equipment is maintained in good condition.

	Training Topic	Supervisor/Trainer	Date
1.	Safety policy and procedures		
2.	Fire and emergency plan		
3.	Medical/first aid		
4.	Back safety		
5.	Field sanitation		
6.	Hazard communication program		
7.	Respirator Protection		
8.	Electrical safety		
9.	Lockout/blockout procedures		
10.	General repair and service		
11.	Tractor		
12.	Pre-operation checks of equipment		
13.	Heat stress		
14.	Personal protective equipment		
15.	Hand tools		
16.	Weld and cut		
17.	Three-point power take-off (PTO)		
18.	Loader		
19.	Forklift		
20.	Backhoe		
21.	Sprayer		
22.	ATVs		
23.	Worker protection standard		
24.	Harvest equipment		





## Targeted Industries Partnership Program (TIPP) Checklist – Page 1

The state Department of Industrial Relations (DIR) and the U.S. Department of Labor are continuing the Targeted Industries Partnership Program (TIPP). State and federal inspectors are enforcing employment laws in California's agricultural, garment-manufacturing, and restaurant industries; other industries may be added in the future. Not every legal requirement under TIPP will apply to you. There may be other laws that apply also but are not listed. Consult with your workers' compensation carrier, a TIPP agency, or your attorney for details.

General	employees)
☐ Farm labor contractors must be federally registered and state-licensed	☐ Federal nondiscrimination poster (15 or more employees)
☐ Employers must have a workers' compensation	☐ Time Off to Vote
insurance policy or be legally self-insured	☐ "Prop. 65" Warning
☐ Workers' compensation notice must be posted	☐ Minor Children Notice
and given to employees.	☐ FLC - Statement of Pay Rates
☐ Employers must have an Internal Revenue Service employer identification number for	<ul> <li>□ Pesticide Safety Information Series A-8 and A-9; Emergency Numbers for Pesticide Handlers</li> </ul>
federal taxes	☐ Your Rights - Family Medical Leave Act (50 or
☐ Employers must have an E.D.D. unemployment	more employees, in 20 weeks in a year)
insurance registration number	Safety and Health Requirements
Required Posters	☐ Written injury and illness prevention program
☐ Federal Minimum Wage poster	(IIPP sample program available)
☐ Cal/OSHA: Safety and Health Protection on the	☐ Written hazard communication program
Job; Access to Medical & Exposure Records; Form No. 200 (during the month of February); Ag Tractors (S-500); Operating Rules for	<ul> <li>□ A person trained in first aid and CPR, one trained person per 20 employees working in remote locations</li> </ul>
Industrial Trucks (S-503); others as applicable, based on activities	☐ First aid kits, contents approved by company's physican
☐ IU-SDI Notice to Employees	☐ Permits for air compressor and tank (in shops
☐ Payday Notice	and mounted on equipment)
<ul><li>☐ Industrial Welfare Commission (IWC) Order 14 (ag occupations)</li></ul>	Field Sanitation in Agricultural
$\square$ Other IWC Orders as applicable	Hand-Labor Operations
<ul> <li>4 (e.g., clericals of an employer whose only other employees are covered by Order 14)</li> </ul>	Toilet facilities:
<ul> <li>8 (post-harvest handling of commodities not produced by the employer, usually including its</li> </ul>	☐ Crew with 1-4 employees: one toilet, even if a mixed-sex crew
clericals)	☐ Crew with 5 or more employees: one toilet per 20 employees of each sex, or fraction thereof
<ul> <li>13 (post-harvest handling of commodities produced only by the employer, usually including</li> </ul>	☐ Toilet paper in suitable holder
its clericals)	☐ Screened and sanitary
☐ Migrant and Seasonal Agricultural Worker	☐ Chemical toilet waste water tank must be able
Protection Act poster; Housing Terms & Conditions; Work Information Notice	to hold at least 40 gallons and must contain effective odor-control and solid-liquefying
☐ Employee Polygraph Protection Act poster	chemicals
$\square$ California nondiscrimination poster (5 or more	<ul><li>☐ Keep service &amp; maintenance records for at least</li><li>2 years</li></ul>







## TIPP Checklist - Page 2

Drinking Water  ☐ Pure, cool water must always be readily available ☐ Dispensed by fountain or single-use cups	<ul> <li>□ Funds securing return of equipment deposited in a joint bank savings account</li> <li>□ Deduction for lost equipment from an</li> </ul>
☐ Container must be covered, protected and kept clean  Handwashing facilities:	employee's final pay is allowed only upon the employee's voluntary written authorization given after the employee fails to return the
•	equipment and only if the loss was due to the dishonest or willful act or gross negligence of
<ul> <li>☐ One per 20 employees or fraction thereof</li> <li>☐ Water tank must be able to hold at least 15 gallons and be refilled with potable water as necessary</li> </ul>	the employee (a very high standard to prove). (Note: in reality, it is a rare situation where a deduction for lost equipment would be allowed.)
$\square$ Soap and single-use towels provided	anowed.)
☐ Sign posted stating: "This water is for handwashing only"	Employer Records
Both toilet and handwashing facilities must be:	☐ Employee's name, address, record identifier (if any), permanent address, occupation,
☐ Located near each other	social security number, sex, and, if under age
☐ Located within a 1/4 mile or five-minute walk of work site (If terrain prevents this, then facilities must be at the point closest to vehicular access.)	<ul> <li>18, birthdate and designation as minor</li> <li>Day and time when workweek starts,</li> <li>beginning and ending times of each work</li> <li>period (meal periods excluded)</li> </ul>
☐ Ventilated and rigidly constructed, with self-closing doors, lockable from the inside	<ul> <li>□ Total hours worked each workday, workweek, and payroll period</li> <li>□ Date, amount, and purpose of any sum</li> </ul>
☐ Inside surfaces non-absorbent, smooth, readily cleanable, and light-colored	withheld from or added to wages  ☐ Pay date and period payment, including
☐ Clean and sanitary	gross net pay
Alternative compliance:	<ul> <li>Total pay period earnings, including value of board, lodging, or other compensation</li> </ul>
May provide transportation to facilities if—  □ Employees are performing field work for less than two hours (including transportation time)	☐ Records kept for three to four years to defend claims under state's unfair competition laws (B&P Codes 17200–17209)
☐ Four or fewer employees are engaged in hand- labor operations on a given day	☐ Number of piece work units produced, if applicable
Transportation of Workers	☐ Basis on which wages are paid (for example, "\$5.75/hr." or "\$.20/vine pruned")
	Minimum Wage
<ul><li>☐ Licensing of drivers</li><li>☐ Vehicle safety standards and inspection stickers</li></ul>	☐ All nonexempt employees must be paid at least the state's minimum wage rate per hour, regardless of whether wages are earned on an hourly rate, piece rate, or salary basis
Tools and equipment	☐ Piece rate earnings may be averaged over a
☐ Employer must provide and maintained required or necessary tools and equipment for employees earning less than twice the minimum wage	workweek to determine whether the minimum wage is achieved. Call U.S. Department of Labor toll free (800) 733-3899 for more information.





#### TIPP Checklist - Page 3

#### **Overtime Premium Pay**

- ☐ 1 1/2 times the employee's regular pay rate (RPR) for hours worked over 10 in a workday and for the first 8 hours worked on the seventh day of the work week; and double the RPR for hours worked over 8 on the seventh day of work in a workweek.
- ☐ Exceptions: irrigators (over 1/2 of time worked in workweek); drivers of certain large trucks (generally, weighing at least 6,000 lbs. with three or more axles)

#### **Payment of Wages**

- ☐ Paid at least semi-monthly (exception: at least weekly for FLC employees)
- ☐ Paid within 72 hours after voluntary quit, unless the employee gave at least 72-hour notice of quitting, in which case pay is due on the employee's last day.
- ☐ Notice of regular paydays, time, and place posted
- ☐ Reporting time pay 1/2 of usual days' pay (at least 2 but no more than 4 hours) for employee who reports for work but is given less than 1/2 of usual days' work; most typical exception is for an Act of God or other cause beyond employer's control

#### **Meal Periods**

☐ A 30-minute unpaid meal period after working 5 hours; may be waived if a work period of 6 or fewer hours will complete a day's work.



#### **Rest Periods**

☐ A 10-minute paid rest period per 4 hours of work or major fraction thereof, based on total workday hours; none required when employee works fewer than 3 1/2 hours in a day.

#### Housing

☐ Compliance with federal housing standards for migrant agricultural workers; inspections and

permits under state Employee Housing Act if 5 or more employees are housed

#### **Child Labor**

Minor children notice must be posted.

- ☐ Minors below age 12 are not allowed to work in agriculture nor be near moving equipment, unprotected chemicals, or water hazards (exception: grower's children).
- ☐ Minors under age 16 may not work in hazardous agricultural occupations. (Minors doing non-hazardous agricultural work are required to obtain a work permit from their school)
- ☐ Minors under age 18 may not mix or load certain pesticides
- ☐ A property owner who benefits from a minor's employment and who knowingly allows child labor violations to occur is liable even if he or she is not the minor's actual employer





### **Examples of Safe Work Practices by Job Classification**

These safe work practices apply specifically to the job that you will be doing. Your supervisor will provide you with the proper training.

#### JOB CLASSIFICATION: Strawberry Harvester



- 1. Use proper lifting methods when handling strawberry boxes.
- 2. Do not run while carrying strawberry boxes.
- 3. Do not load strawberry boxes onto or remove them from a moving vehicle.
- 4. Do not take shortcuts between vehicles and trailers.
- 5. Do not ride on equipment unless seats are provided.
- 6. Be careful when walking in rough and muddy fields.
- 7. Be careful when stepping over furrows and pipes.
- 8. Do not lie under vehicles or trailers.
- 9. Watch out for moving equipment.

#### **JOB CLASSIFICATION: Weeders**

- 1. Follow correct weed-cutting procedures.
- 2. Store hoes properly when not in use.
- 3. Use caution while sharpening hoes.
- 4. Remember that using short-handle tools is prohibited.



#### JOB CLASSIFICATION: Drip Irrigation and Drip Irrigator

- 1. Use proper lifting methods when handling pipes, plastic mulch, and other materials.
- 2. Follow correct saw-cutting and drilling procedures.
- 3. Store saws, drills, and other equipment properly when not in use.
- 4. Apply solvent and glue properly. Avoid inhalation or contact.
- 5. Use caution when punching holes in manifold; keep hands and feet clear.
- 6. Avoid sticking fingers or hands into pipe couplings when connecting.
- Stay clear when tractor and equipment are turning.
- 8. Check oil, water, and fuel levels prior to operating any well pumps, booster pumps, or tractors.
- 9. Do not smoke or have an open flame near any fuel storage area or while refueling.
- 10. Do not start pumps or turn on electrical switches while standing in a puddle of water.

#### **JOB CLASSIFICATION: Fumigation Helpers**

- 1. Stay clear when tractors and equipment are turning.
- 2. Avoid fumigant or insecticide drift at all times.
- 3. Keep hands clear of rollers on tarp-pulling machine.





#### **Examples of Safe Work Practices by Job Classification - continued**

#### **JOB CLASSIFICATION: Checkers**

1. Use caution when stepping over furrows.



#### **JOB CLASSIFICATION: Stackers**

- 1. Use correct lifting methods; bend your legs when lifting objects.
- 2. Use proper lifting methods when handling heavy materials.
- 3. Mount and dismount properly from vehicles to prevent slipping or falling.
- 4. Do not attempt to mount or dismount while vehicle is moving.
- 5. Stay clear of moving vehicles.
- 6. Use caution when cutting strawberry box bands.
- 7. When unloading, watch for falling "V" boards.

#### **IOB CLASSIFICATION: Planters**

1. Be careful when walking on rough terrain.



#### JOB CLASSIFICATION: Sprinkler Pipe Irrigator

- 1. Use extreme caution to avoid contact with power lines (maintain at least a 10-foot clearance at all times) when moving pipe sections.
- 2. Use proper lifting methods when handling sprinkler pipes and other tools or equipment (lift with your legs).
- 3. Secure pipes before moving a pipe trailer onto a public road. Injuries can be caused by load shifting.
- 4. Do not ride on trailer hitch, tractor fenders, or on top of a load.
- 5. Do not stick fingers or hands into pipe couplings when connecting pipe joints.
- 6. Do not lie under pipe trailers or tractors.
- 7. Do not remove power take-off (PTO) guards from pumps or tractors; if guards are not in place, notify your supervisor immediately.
- 8. Operate tractors at a safe speed for the road conditions encountered.
- 9. Check oil, water, and fuel levels prior to operating any well pumps, booster pumps, or tractors.
- 10. Do not smoke or allow an open flame near any fuel-storage area or while refueling.





#### **Examples of Safe Work Practices by Job Classification – continued**

#### **JOB CLASSIFICATION: Farm Tractor Operator**

- 1. Fasten your seat belt securely if the tractor has ROPS.
- 2. When possible, avoid operating the tractor near ditches, embankments, and holes.
- 3. Reduce speed when turning, crossing slopes, and driving on rough, slick, or muddy surfaces.
- 4. Stay off slopes that are too steep for safe operation of the tractor.
- 5. Watch where you are going, especially at row ends, on roads, and near trees.
- 6. Allow passengers to ride only if seats are provided.
- 7. Operate the tractor smoothly, with no jerky turns, starts, or stops.
- 8. Hitch only to the drawbar and to the hitch points recommended by the tractor manufacturer.
- 9. When the tractor is stopped, set brakes securely and use the "park lock," if available.
- 10. Start the engine only from the operator's seat and with the transmission in neutral or park. Never start the engine while you are standing on the ground.
- 11. Never jump off a moving tractor or leave it unattended with its engine running.
- 12. Always keep all shields and guards in place and secured.
- 13. Before you move the tractor and attachments onto a public road, be sure that the warning lights are operational.
- Never start or run the engine in a shed or garage unless the area is fully ventilated.
- 15. Shut off the engine before fueling the tractor.
- 16. Do not smoke or have an open flame near any fuel storage area or while refueling.
- 17. Do not wear loose clothing while operating a tractor or working around moving machinery.
- 18. When operating a tractor on public roads, obey traffic laws, yield to heavy traffic, and use proper signals.
- 19. Stunt driving and horseplay while operating a tractor or equipment are prohibited.
- 20. When operating a tractor, look out for overhead power lines (maintain at least a 10-foot clearance at all times) and avoid making any contact with them.
- 21. Check tractors and equipment each day before operating; unsafe conditions should be reported immediately to a supervisor. Check fuel, oil, water, fluids, tires, brakes, steering, hydraulics, and hoses. Guards must be on PTO.
- 22. Use hearing protection when operating tractors for extended periods of time.
- 23. Use eye protection when working conditions create a dust or wind problem.
- 24. Use caution when mounting the tractor.
- 25. Use caution when hitching equipment to or disconnecting it from tractors; keep your hands, feet, and body clear.
- 26. Be careful when operating a tractor around other people.
- 27. Know how to use fire extinguishers.
- 28. Inspect equipment attachments prior to and during use.
- 29. Watch for field obstacles such as pipes, valves, and air vents.
- 30. Familiarize yourself with different makes of tractors and equipment in use.







### **Examples of Safe Work Practices by Job Classification - continued**

#### **JOB CLASSIFICATION: Truck Driver**

- 1. Inspect fluids, brakes, lights, steering, and tires prior to operating the truck.
- 2. Never jump off a moving vehicle.
- 3. Never start or run the engine in a shed or garage unless the area is fully ventilated.
- 4. Shut off the engine before fueling the vehicle regardless of the type of fuel being used.
- 5. Do not smoke or have an open flame near any fuel storage area or while refueling.
- 6. Obey all traffic laws, such as wearing seat belts and observing the posted speed limit.
- 7. Be sure that the truck is serviced regularly.
- 8. Be extremely careful when operating any vehicle around people.
- 9. Know the location of fire extinguishers and how to use them.
- 10. Properly secure all cargo—stack, cover, and tie down.
- 11. Use caution while hitching trailers or other equipment.
- 12. Always start the vehicle in low gear and shift when necessary.
- 13. Adjust mirrors prior to driving.
- 14. Use care in loading and driving when transporting equipment.
- 15. When a trailer is connected to a vehicle, check that all lights and brakes are working before driving.
- 16. Secure emergency brakes when leaving vehicle.
- 17. Road watering:
  - a) Check fluid levels on all pumps prior to use.
  - b) Do not start pumps/electrical switches while standing on wet soil.
- 18. Report highway accidents to your supervisor immediately and follow instructions kept in the glove compartment.
- 19. Keep trucks clean and tidy.



# Pesticide Safety Information

#### A-8 HAZARD COMMUNICATION INFORMATION FOR EMPLOYEES HANDLING PESTICIDES IN AGRICULTURAL SETTINGS

#### General:

This leaflet provides information on your right to know about work hazards and the Department of Pesticide Regulation (DPR) regulations communication in California.

Pesticides include a variety of products commonly used in agricultural, as well as, non-agricultural settings (such as landscaping, parks, restaurants or hospitals). Insecticides, herbicides, disinfectants and sanitizers are all types of pesticides.

The general purpose of hazard communication is to ensure that potential hazards are identified, and that you are informed about these hazards through training, container labeling, and other forms of warning. Your employer is responsible for knowing and telling you, in a language you understand, about specific pesticides you will be handling, and how you should protect yourself to safely handle them.

#### Worker Rights:

The law requires that you be told about potential hazards in your workplace. You must be trained to deal with them. As an employee, you have certain rights:

- You have the right to look at pesticide use records and Material Safety Data Sheets (MSDS)
- You have the right to file confidential complaints about unsafe work conditions without being punished or fired by your employer
- Whoever pays you must make plans for medical care and see that you are taken to the doctor if you get sick or injured on the job
- If you get sick or injured on the job, you have the right to file a claim for worker's compensation.

Your employer will explain these rights to you. If you need more help in understanding your rights, you

may go to your local county agricultural commissioner's office, the local legal aid or worker's rights office or your union.

Pesticides are only one kind of hazardous substance that may be in your workplace. Hazard communication for other materials is covered by the Department of Industrial Relations (Cal/OSHA) standards found in Title 8, California Code of Regulations, section 5194. Complaints about pesticide problems should be filed with the county agricultural

commissioner. Complaints about other safety problems should be filed Cal/OSHA. The telephone numbers can be found in the government pages of the telephone book.



#### Hazard Identification:

The federal Environmental Protection Agency (USEPA) and DPR conducts hazard identification of pesticides as part of the pesticide product registration and label approval process. This process must be completed before the manufacturer can sell a pesticide. In addition to the "active" ingredients listed on the product label, pesticides commonly contain several "inert" ingredients which are not usually identified on the label. These inert ingredients can also have toxic properties and hazards of their own. If the identity of inert ingredients is needed to treat an acute case of pesticide poisoning, your physician can usually obtain the information from the manufacturer or possibly from DPR.

The pesticide label reflects the overall toxicity and hazards of the mixture. Signal words provide general information about acute eye or skin injury or poisoning potential. The signal word "DANGER"

California Environmental Protection Agency Department of Pesticide Regulation 830 K Street, Sacramento, California 95814-3510 you about high hazard products. "WARNING" means moderate hazard and "CAUTION" means the hazard is fairly low. The manufacturer is required to address hazards by placing specific information or precautions on the pesticide label.

- If the hazard is severe eye or skin injury, the label will have precautionary statements such as: "Corrosive, causes eye and skin damage".
- If the pesticide is very poisonous, the label will show the skull and crossbones symbol and the word "POISON".
- Language such as "fatal" or "may be fatal if swallowed, inhaled, or absorbed through the skin" also indicates high toxicity.
- Some labels warn about known or suspected effects such as cancer, organ damage, or birth defects.

However, since new information may take some time to be included on labels, you cannot rely totally on labels to identify hazards. Your employer must have, on file, a copy of the MSDS for the pesticide(s) used. Other sources of hazard information include industry trade bulletins, government hazard alerts, and Pesticide Safety Information Series (PSIS) leaflets.

#### **Training/Education:**

Training is one important way that information about hazards and how to protect against them is made available to you. If you work with pesticides, you must be given adequate training about handling pesticides. You must be given training before you begin to work with pesticides and you must be given refresher training each year. You must fully understand the immediate and long term hazards of use and know the procedures you should follow to safely work with the specific pesticides you will handle, including the operation of pesticide handling equipment and use of personal protective equipment. PSIS A-1 describes everything that must be covered in pesticide training. Special training requirements exist, for those who use respiratory protection (see PSIS A-5). All training must be documented in writing and signed by you.

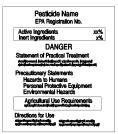
You must be informed about where and how you can obtain access to all of the work-related documents and records that must be kept (see Table 2). You must also be informed about where and how to

obtain access to this PSIS, the MSDS and pesticide use records.

#### **Labels And Other Forms Of Warnings:**

In addition to training, there are a number of other ways that information is provided to you (see Table 2).

The pesticide label provides use instructions that are legally required to be followed, and provides valuable hazard information. The labeling that covers the particular use must be present at the work site. Normally, this is



the label on the container. However, if the use is only described on a product bulletin or other supplemental labeling, or if a service container (any container that is not the original manufacturer's container) is used, your employer must ensure that the proper labeling is present.

When possible, keep pesticides in their original container with the original label. If they are repackaged into service containers, do not use food, drink, or household product containers. Service containers must be labeled to identify the pesticide, its signal word, and the person or firm responsible.

Warning notices must be posted, facing all directions of probable approach, around areas where pesticides or containers with the signal words "DANGER" or "WARNING" are stored. The notices must be in a language you understand. More information on pesticide storage, transportation, and disposal is found in PSIS A-2.

The operator of the property must assure that you and others (including any other employer who might have employees), who are on or likely to enter treated areas, are warned about the identity of the pesticide and the precautions to be observed, including applicable reentry intervals. This may be done by posting signs around treated fields. If signs are not required by label or regulations you may be told orally. Follow directions about keeping out of treated fields or restricted areas.

In November 1986, California voters approved an initiative to address concerns about exposure to toxic chemicals. That initiative became the Safe Drinking Water and Toxic Enforcement Act of 1986, better known as Proposition 65. Proposition 65 requires the Governor to publish a list of chemicals that are known to the state to cause cancer, birth defects, or other reproductive harm. Chemicals that cause cancer are called **carcinogens**; those that cause birth defects or other reproductive harm are called **reproductive toxicants**. The Proposition 65 list contains a wide range of chemicals, including dyes, solvents, pesticides, drugs, and food additives. If a pesticide is on the list, your employer must warn you if you are exposed to levels of the pesticide that present a

significant health risk. An employer may also choose to provide warning simply based on the presence of the chemical, even if the risk is not significant. In the case of worker exposure to pesticides, this warning is provided through the required hazard communication procedures. As an agricultural crop producer, your employer is required to keep application-specific information on the pesticides used. You have a right to look at this information and should have learned of the location of this information in your training. If you are unsure of the information location, ask your supervisor or employer. The following table lists the currently registered active ingredients on the Proposition 65 list.

#### Table 1 **CURRENTLY REGISTERED PESTICIDES ON THE PROPOSITION 65 LIST** PESTICIDES KNOWN TO THE STATE TO CAUSE CANCER DDVP (dichlorvos) Acifluorfen Lindane Potassium dichromate Propargite Alachlor p-Dichlorobenzene Mancozeb Arsenic acid 1,3-Dichloropropene Maneb Pronamide (propyzamide) Dipropyl Propylene oxide Arsenic pentoxide Metam sodium Arsenic trioxide isocinchomeronate Metiram Silica aerogel Sodium bichromate Cacodylic acid (MGK repellent 326) Mineral oil Captan Ethylene oxide Oxadiazon dihydrate Chlorothalonil Folpet Sodium dichromate Pentachlorophenol Formaldehyde (gas) Chromic acid *o*-Phenylphenate, sodium Creosote Iprodione (o-phenylphenol, Daminozide sodium) PESTICIDES KNOWN TO THE STATE TO CAUSE BIRTH DEFECTS OR REPRODUCTIVE HARM Arsenic, pentoxide Cyanazine Nicotine Arsenic, trioxide **Ethylene oxide** Oxadiazon Benomyl Metam sodium Streptomycin sulfate Bromoxynil heptanoate Methyl bromide (as a structural Vinclozolin Bromoxynil octanoate fumigant) Warfarin **Exposure Monitoring:** If they are used on crops, they are handled by any If you regularly handle (handle the pesticide for more person: \_\_\_\_\_ Six days or less each 30 days than 6 days in any 30-day period) organophosphate \_\_\_\_ More than six days in 30 days or carbamate pesticides with the signal word If they are regularly handled by anyone, the physician "DANGER" or "WARNING" for use on agricultural providing medical supervision is: crops, there are requirements for medical supervision and blood testing to detect overexposure. These Name requirements are covered in PSIS A-11. Address \_\_\_ This workplace: DOES DOES NOT Telephone number \_\_\_ use these pesticides on agricultural crops.

#### Records:

There are a number of records that must be maintained by your employer and made available to you (see Table 2). These records can be grouped into three general kinds: training, exposure, and medical supervision.

After you sign them, your employer must keep records of training provided to you. Records of the content of the training program must also be kept. You employer must also keep records of most kinds of pesticide use. If organophosphates or carbamates are being used as described under exposure monitoring, the record must include the pesticide, the date, and identity of the user. If organophosphate and carbamate pesticides are used on a regular basis, your employer must maintain records verifying the required medical supervision and response to any overexposure.

The required records are kept at the following location at headquarters:

#### **EMERGENCY MEDICAL CARE**

If you become ill or are injured on the job you must be taken for medical attention to:

More information on first aid is available in PSIS A-4.

This leaflet assists readers in understanding pesticide regulations. It is not a legal document. The legal reference can be found in the California Code of Regulations, Title 3. The words "must" and "should" used in the text are not the same. The word "must" means the action is required and comes from California regulations. The word "should" indicates additional handling practices that are recommended to further reduce exposure.

## Table 2 SUMMARY OF HAZARD COMMUNICATION RECORDS/DOCUMENTS

Record/Document	Retention	Location	Section
Training records	2 years	Headquarters	6724(e)
Written training program	2 years	Headquarters	6724(a)
Respirator program procedures	During use	Headquarters	6738(h)
Emergency response plan (fumigants)	During use	Work site	6780(d)
Pesticide Label	During use	Work site	6602
Pesticide Safety Information Series	2 years	Headquarters	6723(b)
Material Safety Data Sheet	2 years	Headquarters	6723(b)
Treatment notification method1	2 years	Headquarters	6619
Field posting1	During use	Work site	6776
Storage area posting <sup>3</sup>	During use	Work site	6674
Identity of medical supervisor notice2	During use	Headquarters	6728(a)
Employer/medical supervisor agreement <sup>2</sup>	3 years	Headquarters	6728(b)
Medical supervisor recommendations <sup>2</sup>	3 years	Headquarters	6728(c)
Cholinesterase blood test results <sup>2</sup>	3 years	Headquarters	6728(c)
Employee work practice review <sup>2</sup>	3 years	Headquarters	6728(d)
Emergency medical care notice	During use	Work site	6726
Medical evaluation (respirator use)	During use	Headquarters	6738(h)
Pesticide use records	2 years	Headquarters	6624
Employee exposure records <sup>2</sup>	3 years	Headquarters	6728

<sup>&</sup>lt;sup>1</sup> Agricultural production

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<sup>2</sup> Signal word "DANGER" or "WARNING", organophosphate and carbamate, agricultural production

<sup>3</sup> Signal word "DANGER" or "WARNING"

#### **SAFETY TIPS**



- Protect your skin.
   Wear clothes with long sleeves and long pants, shoes or boots, socks, a hat and/or scarf and gloves.
  - Make sure they are clean and
- without holes.



- Take a bath or shower as soon as you get home from work
  Wash with soap & water a
- hampoo on your hair Put on clean clothes



- Pesticides get on work clothes and
- then on your skin

  Wash work clothes before wearing
- them again
  Wash work clothes separate from other clothes



- Always wash your hands before eating, drinking, smóking, chewing gum or
- going to the bathroom

   Do not cook food with wood found in the field



- Never put pesticides in food containers
- Do not take farm pesticides or their containers home
- Keep children away from pesticides

#### ILLNESS/INJURY



- Pesticides get on your skin and clothes when you touch sprayed plants, soil, irrigation water or are exposed to spray drift.
   They can move from your clothes and onto your skin.
   Some pesticides easily go through your skin and can make you sick.

- Tell the boss if you are sick or hurt at work. If the illness/injury is work-related, your employer will pay for all medical care of that illness. If the condition is work-related you may be paid for your time off work while sick or hurt.

#### **FIRST AID**



- Wash immediately with the closest clean water if pesticides are spilled or sprayed on your clothes or skin.
- Change into clean clothes
- Tell your boss after washing



- Wash if your eyes or skin begin to itch or burn
- Use lots of water
- Tell your boss, you should go to a



- If you feel sick at work (headache, stomach ache, vomiting, dizzy) tell your boss.
- He or she can make sure you are taken to a doctor.
- Have someone else drive you to the doctor if you are sick or injured

## Pesticide Safety Information Series A

#### A-9

#### HAZARD COMMUNICATION INFORMATION FOR **EMPLOYEES WORKING IN AGRICULTURAL FIELDS**

#### General:

This leaflet tells you of your right to know about potential work hazards. This leaflet also helps your employer comply with these regulations. employer is responsible for knowing and telling you, in a language you understand, about specific pesticides that have been used, and how you should protect yourself from them.

Pesticides are only one kind of hazardous substance that may be in the workplace. Hazard communication for other materials is covered by the state Department of Industrial Relations (Cal/OSHA) standards found in Title 8, California Code of Regulations, section 5194.

Complaints about pesticide problems should be filed with county agricultural Complaints commissioner. about other safety problems should be filed with



Cal/OSHA. The telephone numbers can be found in the government pages of the telephone book.

#### Your Rights As An Employee:

The law requires that you be told about potential hazards in the workplace. In addition, you must be trained to deal with those hazards. There are also warning requirements to help you know when hazards are present. As an employee you have certain rights:

- You have the right to look at Material Safety Data Sheets (MSDS) and pesticide use records
- You have the right to file confidential complaints about unsafe work conditions without being punished or fired by your employer
- Whoever pays you must make plans for medical care and see that you are taken to the doctor if you get sick on the job

If you get sick or injured at work, you have the right to file a claim for worker's compensation.

Your employer will explain your rights to you. If you need more help in understanding your rights, go to your local county agricultural commissioner's office, the local legal aid, worker's rights office or your union.

#### **Hazard Identification:**

Before a pesticide can be sold and used in California, it is studied and reviewed to find out about harmful effects. Pesticide manufacturers tell you, on the product label, how to reduce these hazards. That is why the label contains certain protective equipment requirements, and why there may be a time after a pesticide application when you cannot go back into a field.

#### **Restricted Entry Intervals:**

You must not go into a field for any reason for at least 4 hours following any pesticide application. After a pesticide is sprayed on a field it begins to go away. Some pesticides take longer than others to go away. A restricted entry interval (REI) is the time it should take for the pesticide to go away and it is safe to work in the field again.

Generally, if you will be handling the plants or other treated things, you should not work in a field during a REI. This includes work such as hand harvesting, detasseling, thinning, hand weeding, topping, planting, sucker removal, pruning, disbudding, roquing, packing produce and other work that requires you to handle the plants. Some pesticide labels allow for limited field work during the REI.

For more information call (916) 445-4300 or Internet: www.cdpr.ca.gov

California Environmental Protection Agency Department of Pesticide Regulation 830 K Street, Sacramento, California 95814-3510

## OTHER AVAILABLE ASSISTANCE



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- Division of Occupational Safety and Health (DOSH), Cal/OSHA Compliance Integrated Management Information System.



## QUESTIONNAIRE We Want to Hear from You

2211 Park Towne Circle #4, Sacramento, CA 95825.

We value and welcome your comments on the Farm Labor Contractor Safety and Health Guide. Your feedback is very important for the improvement of Cal/OSHA Consultation Services. Please detach and complete this questionnaire and fax it to (916) 574-2532 or mail it to:

Cal/OSHA Education and Training Unit,

We thank you for your important participation!

	YES	NO	COMMENTS
1. After reviewing this guide, do you have a better understanding of the major hazards of agricultural work?			
2. Does this guide reflect the most common agricultural hazards and injuries that you have encountered?			
3. Does the information in this guide help you to:			
<ul> <li>Evaluate the effectiveness of your injury and illness prevention program (IIPP)?</li> </ul>			
<ul> <li>Increase your awareness of agricultural safety and health issues?</li> </ul>			
• Identify unsafe work practices and hazards?			
<ul> <li>Provide materials for the safety and health training of your supervisors?</li> </ul>			
4. Would you call Cal/OSHA Consultation Service for on-site assistance?			
Why or why not?			
5. Do you have any success stories to share with us (calls, or other injuries or illnesses)?			
If so, please describe below:			
<ol> <li>Do you have any suggestions for improving the factorials?</li> </ol>			y other portions of this
guide?			
7. Overall, do you believe this guide is useful, inform	native, a	nd easy	to understand?

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## **Cal/OSHA Consultation Programs**

Toll-free number: 1-800-963-9424 • Internet: www.dir.ca.gov



Your call will in no way trigger an inspection by Cal/OSHA enforcement.

- Voluntary Protection Program San Francisco, CA 94142 (415) 703-5272
- Education Unit Sacramento, CA 95825 (415) 703-5272